The NEWS of MGH

Vol. 24, No. 1 Boston, Massachusetts February 1965

Transplantation Immunology Center Under Construction

A clinical research center for multidisciplinary investigation of immunological problems in tissue transplantation at the MGH has been made possible by an annual USPHS grant of approximately $190,000 from the National Institute of Allergy and Infectious Diseases.

The Transplantation Immunology Center on White 12 will be directed by Dr. Paul S. Russell, Chief of the General Surgical Services. The co-director will be Dr. K. Frank Austen, a member of the Medical Services.

A comprehensive pilot program in homotransplantation has been in progress for about 20 months at MGH with the aid of a USPHS general research support grant.

The general goal of the new program will be to determine the most effective means for controlling the "foreign tissue" rejection reaction. Transplantations will be limited to cases that offer opportunities for obtaining data and knowledge that could not be acquired by other means. Control of the host rejection reaction is a prerequisite to successful tissue and organ transplantation.

An initial objective of the program will be the development of histocompatibility tests useful in the selection of human donors, to minimize differences with respect to tissue antigens.

The transplant team, in addition to Drs. Russell and Austen, will include: George P. Baker, Jr., MD, Lot B. Page, MD, Sidney Leskowitz, PhD, and Alan C. Aisenberg, MD, all from the Medical Services; Anthony P. Monaco, MD, from the Surgical Services; Guy W. Leadbetter, Jr., MD, from the Urology Service; and Martin H. Flax, MD, from the Department of Pathology.

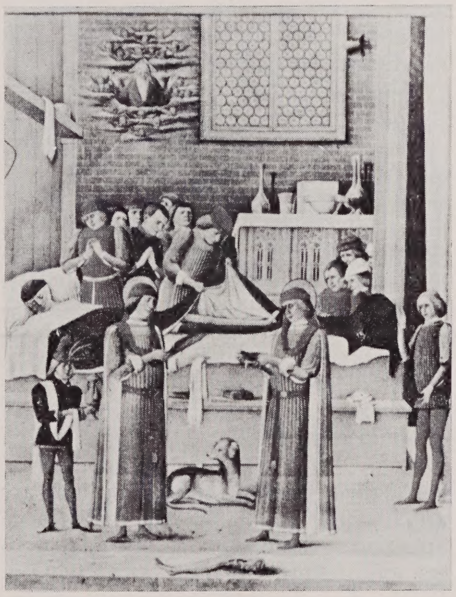
Dr. Russell has prepared the following statement of policy concerning the Transplantation Immunology Center: "Although the problems currently apparent in the field of transplantation extend into widely divergent regions of medical science, our main research objectives will center about immunologic questions. Although there is growing confidence in the potential applicability of tissue transplantation to clinical medicine, and indeed our MGH results with renal homotransplantation give some ground for encouragement, we feel strongly that much more careful work is needed, particularly in thorough studies of the many provocative immunologic issues that are outstanding. These are as important following 'successful' transplants as after prompt rejection.

"Other important aspects of the overall problem of clinical transplantation cannot be neglected, however, so that some attention will be paid to such matters as the development of improved surgical technics and the preservation of donor tissue or organs.

"Consistent with the long tradition of MGH emphasis on the quality of all aspects of patient care, we feel that the complicated and demanding clinical problems which are inevitable in this field call for a well organized team of expert clinicians with a variety of special qualifications in close coordination with appropriate ongoing laboratory investigation.

"This team approach will likewise increase the potential of the present effort to contribute to teaching at both the graduate and the undergraduate levels.

"These studies must be performed with the highest possible clinical standards so that patterns may be set toward dealing with the perplexing new moral and ethical questions which have appeared in the field of organ transplantation."



The twins Cosmas and Damian of Asia Minor, who in the 3d century were credited with miraculously transplanting a leg from a recently deceased man to replace the diseased leg of their patient, shown above. Thus they became the patron saints of physicians. (Detail from a painting attributed both to Mantegna and to Ferrari.)

Lowell Lectures

Once again a course of free public lectures is being given at the MGH under the auspices of the Lowell Institute of Boston, the subject this time being "The Crisis Facing the Contemporary Hospital." In this course attention is being focused on the relationships between the teaching hospital and its house staff, the medical school, and the private patient — at a time when the ratio of private patients to ward patients is increasing.

The lectures have been both informative and unusually stimulating. They are being given in the beautifully redecorated and rearranged Lecture Hall Lounge in the Moseley Building, and at the Prudential Center.

The list of lecturers and their subjects follows:

Robert J. Glaser, MD, President of the Affiliated Hospitals Center and Professor of Social Medicine at the Harvard Medical School, "The Teach-

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Corporation Dinner

The Annual Dinner given by the Board of Trustees for the MGH Corporation was held in the Skyline Room of the Boston Museum of Science on the evening of December 3. Mr. Francis C. Gray, President, opened the program and then yielded the gavel to Mr. John E. Lawrence, Chairman of the Board. The two principal speeches, given by Dr. Ebert and Dr. Berry, are printed in the adjoining columns. Additional remarks were contributed by Dr. John H. Knowles, General Director. A poem delivered by Mr. Francis W. Hatch, Associate Trustee (and Poet Laureate), is printed on Page 3.

New Areas Being Developed Within Medical Services

By Dr. Robert H. Ebert

The Medical Services at the MGH are a dynamic and exciting department, at once youthful in enthusiasm and yet mature in judgment of excellence. They are old in the tradition of scholarship, and young in impatience with dogma as a substitute for experiment. This is a poor environment for the man who wishes to avoid challenge and who would hide ignorance behind the mask of authority. It is a magnificent home for the man who acknowledges that his education is never complete.

Recently I was asked how one would re-create the environment of the MGH in a relatively new hospital. I was reminded of the answer given by a gardener at Magdalen College, Oxford, when asked by an American lady how he was able to cultivate such a perfect lawn. He replied that the method was relatively simple; he said, "You cut it and roll it, and cut it and roll it for about 400 years, and then you have a lawn like this."

Teaching on Private Service

In the brief time available I can do no more than touch upon the activities of the Medical Services. With the help of a number of simple devices and several extra members of the House Staff, we have been able to improve substantially the quality of patient care and teaching on the private service.

We have, with the cooperation of the admitting office, concentrated the medical patients in the Baker Memorial as much as possible on two floors. Two teams of house officers, each with one intern and two assistant residents, are assigned to the private service all times along with one senior resident. This has allowed more time for rounds and the follow-up of patients, and has given us some new insights into the usefulness of the private service for teaching.

Preventive Medicine

The general hospital must be concerned not only with acute curative medicine but also with the epidemiology and prevention of disease. We are fortunate to have with us full-time Dr. Victor Sidel, who has recently been appointed Chief of the new Preventive Medicine Unit. There are several kinds of things which he has initiated and which will be facilitated by the new computer facilities at the MGH. He has begun a study of the patterns of admission and medical care here, and this should help us answer several questions:

Why do certain people choose the MGH as their source of medical care? At what point in their illness do they seek medical attention? What is the relative role of the MGH in providing total medical care in the community? Hopefully, this study will do much to tell us *what* we are, not just what we *think* we are. It should substitute fact for clinical impression.

Another project which is being initiated is more specifically related to preventive medicine. A study of persons sick enough to be admitted to a general hospital affords an opportunity to determine whether preventive measures might have altered the course of their illness and allows an estimate of the amount of needless medical care which the hospital must provide.

Ambulatory Care

Finally, the Medical Services are much concerned with the problem of ambulatory care, and are in the process of defining goals in this area. While the ultimate goal is always excellent care of the patient, the design of an outpatient facility must reflect the specific needs of the institution in terms of the education of medical students, House Staff, and Fellows, and must also allow the Staff to pursue research projects concerned with the natural history of the disease.

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Teaching Hospital: An Instrument of Social Medicine

By Dean George P. Berry

For a decade and a half it has been my great privilege to serve as Dean of the Harvard Faculty of Medicine. Throughout this exciting period there have been no more challenging and rewarding opportunities to work for the advancement of medicine than those that have concerned the MGH. Beyond that, it has almost always been fun, and I am grateful to all of you for your help in making it so.

Samuel Johnson liked to hope that "age will perform the promises of youth." As the years go by, I find myself wishing the same thing — more and more frequently. Any who would like to join in this wish can be tremendously heartened by your performance, for the MGH has evidently found the fountain sought so long in vain by Ponce de Leon.

It is not only the fact that the MGH is Harvard's oldest and largest partner in our common medical enterprise that has made you so distinguished! It is also because you have always shown the youthful qualities of vision, imagination, and the ability to change. You have engaged in a relentless and never-ending search for better ways to improve the health of those who seek your aid and of the community of which you are such a vital part.

Men of Vision

Boston medicine has forged steadily ahead ever since the days of the Revolution, on whose battlefields the Harvard Medical School was born. But always it has moved with vision. In 1810, men of vision like John C. Warren, James Jackson, and their associates, seeing the limitations of the Harvard Yard as the seat of a medical school, planned a hospital that would foster learning hand-in-hand with the care of patients. It has always struck me that the founding of the MGH marked the passing of Harvard from its youth as a provincial college to its maturity as a university. The founding of the MGH also marked the beginning of Boston as a world center of medical care and education.

The forward momentum of Boston medicine has been dramatized by the stream of contributions flowing generation after generation from the Warrens, the Jacksons, the Minots, the

Shattucks — one could mention others. These remarkable families, whose members keep adding luster to the traditions of the past as they forge new ones for tomorrow, symbolize the cyclical renewal of medical leadership at the MGH as students grow into interns and interns into residents on your wards and in your clinics.

Social Responsibilities

Tonight I wish with you to think aloud for a moment about where we may be going. With this sophisticated group there is no need to emphasize the impact of the scientific revolution on medicine, nor to stress the role of molecular biology in achieving a better synthesis of universal principles. You have been vitally involved in creating and utilizing these advances. Certainly medical research will win many more dramatic victories over physical and mental disease. You are helping to make this possible. And, while medical scientists continue to push out the horizons of knowledge and clinicians strive to bring the new knowledge to bear more promptly and efficiently on the patient's care, the Hospital will be adjusting its structures and functions to foster both.

Without detracting in the slightest from either the promise or the challenge of medical science and its clinical applications, let me venture to predict that it is in the area of the social responsibilities of medicine where the greatest progress will be made. This will come to pass, I think, because this is the area in which the greatest progress *must* be made to meet society's demands.

Medicine a Social Science

During my talk as president in 1952 to the Association of American Medical Colleges, I stressed the necessity that we "adapt medical education to the needs of modern life . . . (by) orienting teaching methods to an understanding of the total patient in his setting." This statement startled no one; Virchow had emphasized over 100 years earlier that "Medicine is a social science in its very bone and marrow."

What is startling — and distressing — is that this theme has to be reiterated, and reiterated again, for the simple reason that medical schools, teaching hospitals, and practicing physicians have been so slow to grasp the significance of the fact that man is a social animal. It is astonishing how long the medical profession treated the disease in isolation from man, and man in isolation from his environment.

The instrument known as the teaching hospital must be used like a scalpel to open new areas of investigation in the behavioral sciences — sociology, social psychology, social anthropology — and, in so doing, enable social medicine to assume and play its proper role as the most compelling of the behavioral sciences.

The teaching hospital is ideally situated to provide the cutting edge for social medicine (you all know I'm not talking about "socialized medicine") because a teaching hospital is closer to the individual *in* the community and closer *to* the community itself than any other part of the university.

Advancement of Social Medicine

How rapidly the teaching hospital can make of social medicine a powerful force for promoting the health and welfare of man, will depend primarily on two factors, as I see it.

The first factor concerns the rapidity and effectiveness with which the teaching hospital can move into closer relationships with healthy as well as sick individuals; more especially, into closer relationships with the social workers, psychologists, courts, public health officers, and the many others involved in the community's welfare.

The second concerns the rapidity and effectiveness with which the teaching hospital can move into a closer relationship with other departments of the university, especially the departments in the behavioral sciences. It takes time and effort on both sides for disciplines to fuse. Simply learning a common language is difficult.

The MGH has been a leader in bringing scientific medicine into the mainstream of medical practice ever since James Jackson conducted his investigations of typhoid fever at the bedside. As an example of planned leadership in this area, let me cite the foresightedness of the Hospital in establishing its Committee on Research in 1946, at a time when many hospitals looked askance at research as merely a wartime necessity.

The ability of the MGH to grasp early the opportunities of scientific medicine has its more recent parallels in the realm of social medicine. Erich Lindemann and his colleagues have pioneered in social psychiatry. The study of the West End relocation is now a classical model for social scientists and others working in the field of urban renewal.

Nathan Talbot has given new dimensions and clarity to the social aspects of pediatric medicine. His efforts to strike a better balance between the natural sciences and the sociopsychological facets of pediatrics exemplify the vigorous response of the MGH to social needs.

The late Walter Bauer will be as well remembered for his work in social medicine as for his bold attempts to bring fundamental biological techniques into clinical research.

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To Dean Berry

George Packer Berry
George Packer Berry
Is he port
or is he sherry?
No, no indeed
from tie to socks
George Berry's Scotch,
Scotch on the rocks!

George Packer Berry
George Packer Berry
A river to cross,
no bridge, no ferry —
no problem for
the likes of him.
Through deepest water
George can swim.

George Packer Berry
George Packer Berry
A strategist
like Commodore Perry,
he blasts each problem in the way.
"Spurlos versenkt"
the Germans say.

George Packer Berry
George Packer Berry
Original he is
oh very!
He sutures hospitals
oh brother
tying one,
onto another.

George Packer Berry
George Packer Berry
Every cot
in County Kerry
marvels at your
skilled ligations
diverting blood
from corporations.

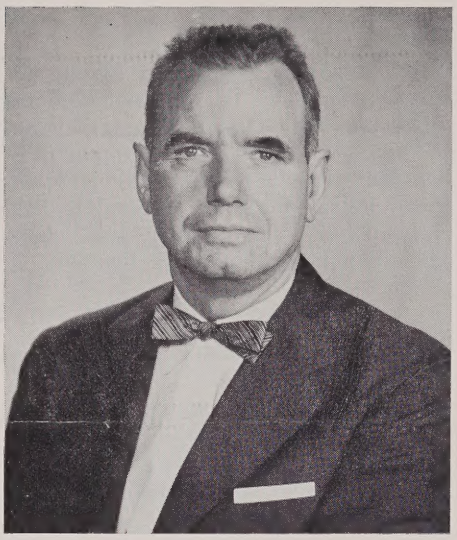
George Packer Berry
George Packer Berry
We salute you
with the query
where's the man with
half your range?
Master of
incredible change.

F.W.H.

Report from Miami

The AMA and Medical Care

By H. Thomas Ballantine, Jr., MD



This article was written for The NEWS of MGH upon the request of the Editorial Board in order to stimulate thinking upon the crucial problems involved in financing medical care. It was written some time before Dr. Donovan Ward, President of the AMA, made an effort (reported in the press on January 11, 1965) to head off Medicare by proposing that federal and state agencies help the aged needy to purchase private health insurance under the Kerr-Mills program. It is not felt that President Ward's new proposal necessitates any significant revision of Dr. Ballantine's article.

I have just finished reading the Presidential Address of Dr. Donovan Ward (*JAMA*, **190**, Dec. 14, 1964), which was acclaimed by the House of Delegates in these words:

"We firmly believe that Dr. Ward has correctly depicted our deep interest — our concern — and our unbounded determination to preserve the vitality, promise, and potentiality of our American system of medicine."

This is one point of view, but I found that reading these remarks re-engendered in me the same feelings I had when I heard them at the Clinical Congress of the AMA on November 30, 1964: frustration, irritation, and dismay.

Dismay, because our system of medical care seems to be hurrying down the road to that deplorable terminus, federal control of all medical services; and the speed of travel seems to be directly proportional to the apparently intransigent position of the AMA.

Irritation, because such an end is unnecessary.

Frustration, because the will of the majority of the AMA appears to commit it to a policy of hara-kiri, and because the proposals which might avert what I believe to be a true catastrophe are supported by so few.

If this seems too extreme an indictment, let me quote and discuss certain portions of the Presidential Address.

To begin with, it is pleasing to note that Dr. Ward did not say, "We stand at Armageddon." He did, however, refer to the position of the AMA as akin to that of England after the fall of France in 1940. I would assume from this that he feels the AMA stands virtually alone in its opposition to the King-Anderson Bill.

Dr. Ward then went on to say, "Now where does all this leave us? It leaves us exactly where we have been from the beginning — standing on principle where honorable men must ever be found in moments of distress if their cause is to prevail."

AMA Principles

In a search of this address for the "principle" on which the AMA stands, I could find only this statement: "In keeping with the most honored principles of our profession, I again emphasize that every individual must be assured of good medical care when he needs it, and that no one shall be denied medical care because of inability to pay."

This is indeed a time-honored and universally accepted principle of our profession, but I submit that it is not exactly germane to the argument between the AMA and the Congress in 1965.

Leaving the question of principle aside, one finds that in Dr. Ward's opinion the AMA is "for the Kerr-Mills Bill to help those who need help." It evidently feels that implementation of this law by the states will make other legislation unnecessary.

The AMA is also, according to its new President, in favor of the following: (1) Preservation of the freedom of our own citizens to spend their own dollars in their own way, not for Washington authoritarians to spend their money for them."

(2) "Preservation of a profession in which imagination, experience and capability are given full play in prolonging life and alleviating suffering, not one subject to bureaucratic interference and direction."

We then find that the AMA states: "The public has been asked to believe that a program of government financed and government managed health care would give more and better treatment at less cost. We believe it would give less and poorer care at greater cost."

And also: "We are opposed to making older persons federal wards. We are opposed to exploiting the young by forcing them to assume an unpredictably heavy tax burden to underwrite the health care of millions of older citizens who are fully able to take care of themselves. We are opposed to government undercutting and disrupting the continuing progress of private health insurance and prepayment plans. We are opposed to offering false promises to the unfortunate who do need help. We are opposed to this invasion of the voluntary relationship between the patient and the physician. We deplore the adverse impact on potential students of medicine because of impending government controls over the profession."

It is apparent that no thinking person could take issue with these statements, if one accepts the basic premise that further government participation in furnishing health care will lead to the ends so eloquently described by Dr. Ward.

To be for the principle of providing medical care to a sick person regardless of his ability to pay can no more

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be opposed than can motherhood, the flag, and the right of free speech be condemned. Opposition to "constant bureaucratic interference and direction" in the providing of medical care, opposition to "offering false promises to the unfortunate who do need help," opposition to "invasion of the voluntary relationship between the patient and the physician" — all of these are as honorable as opposition to rape, involuntary servitude, and slavery.

But is this the real issue, or is the medical profession behaving like an organization of small businessmen dedicated to the "principle" that they should be allowed to gain their livelihood free from government interference?

AMA Strategy

It was most interesting that in rebuttal to a point of view indicating that perhaps the AMA had adopted a "Maginot line complex" and was about to be outflanked, Representative Durwood Hall of Missouri (also a physician) presented a short lecture on political strategy. His thesis was that any attempt to compromise an issue before the argument is joined weakens the position of the party offering the compromise.

Dr. Hall is quoted in the *Medical World News* for December 18, 1964 as stating, "We must stand on principle. There is a place for compromise — but it is later."

One might conclude, therefore, that the AMA is prepared to compromise and that rather than standing on firm principle it is strengthening its bargaining position. Whether in the end this will turn out to be good or bad political strategy will be known only after the event.

And so the stage is set: the AMA is girding its loins to do battle against further "intrusion" of government into the financial problems surrounding the furnishing of medical care to its citizens. At the same time it professes to be "for" a set of ill-defined "principles" of such a vague nature as to be all but incomprehensible to the average taxpayer. The public sees this organization pushed back from one "status quo" to another while it fervently exhorts its rank and file to "hold the line."

What different principles and practices could the AMA embrace? First, it could clearly proclaim its unshakeable belief that the best medical care is that which allows an individual patient to seek out an individual physician and enter into an agreement, mutually acceptable to them both, which

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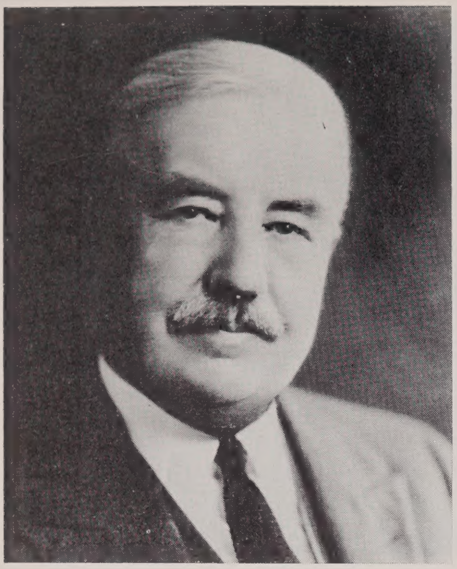
Miss Marguerite M. Ryan, a Red Cross Nurses' Aid Volunteer at MGH for 23 years, receives the 1964 Jessie W. Harding Award for outstanding service from Dr. Chester M. Jones (left), Chairman of the Trustees' Advisory Committee to the Volunteer Department, and Mr. John E. Lawrence, Chairman of the Board of Trustees. The occasion was the annual Volunteers Tea in Bartlett Hall on Dec. 1. In 1964, 768 Volunteers gave the Hospital more than 60,000 hours of service. (Photo by Clayton Hubbard)

Six graduates of unique MGH course for directors of hospital volunteer services receive certificates from Dr. Ellsworth T. Neumann, Administrator. Left to right: Mrs. Mary C. Marple, Wellesley; Mrs. Genevieve Cormack, Cambridge; Dr. Neumann; Miss Roberta Gallagher, Providence, R. I.: Mrs. Shirley Bechtel, Chicago, Ill.; Mrs. Sandra Meshorer, Wrentham; Mr. Robert W. Baldwin, Chelsea; and Miss Mary Ruth Wolf, Director of Volunteer Department, MGH, and originator of the course in 1961.

Professor Schachman: Warren Triennial Lecturer

Professor Howard K. Schachman, Director of the Biochemistry and Virus Laboratory at the University of California in Berkeley, has been awarded the $1500 Warren Triennial Prize Lectureship for 1965 by the Board of Trustees of the MGH, acting on the recommendation of the General Executive Committee. He will give his lecture on March 2 (4:30 PM) in the Morse Auditorium of the Museum of Science in Boston. In addition to significant contributions to our knowledge of the physical chemistry of viruses, nucleic acids, and proteins, he is credited with the development and application of the analytical ultracentrifuge. In 1962 he received the American Chemical Society award in chemical instrumentation.



Joseph A. Capps, MD

(1872-1964)

Dr. Capps was the oldest member of the MGH House Pupils Alumni Association until he died on September 16, 1964. The following excerpts are taken from an article on his life by his son-in-law, Dr. David G. Cogan, Chief of Ophthalmology at the Massachusetts Eye and Ear Infirmary, which appears in the current issue of the Harvard Medical Alumni Bulletin.

Joseph Almarin Capps was born on February 28, 1872, in Jacksonville, Illinois. He was one of eight children. His father was a woolen manufacturer whose ancestors had first landed in Virginia in 1610. . . .

At first he enrolled in Yale Medical School, but after one year he transferred to Harvard Medical School. He was admitted to the Class of 1895, which also included Drs. Harvey Cushing and Elliott P. Joslin. During his fourth year Capps was awarded the coveted George Cheyne Shattuck Fellowship to carry on a research program under the tutelage of Dr. William T. Councilman.

* * *

Dr. Capps was appointed House Pupil (intern) at the MGH on the service of Dr. Frederick C. Shattuck (East Medical, 1896).

Of the many anecdotes that have been told of this year, perhaps the most revealing was Dr. Capps' official discharge from the Hospital for the unauthorized removal of a femur from a patient dead of leukemia. Not only was the femur important for study but the East and West Medical Services were in "deadly" contest for the percentage of autopsies obtained. Apparently, when autopsy permission had been refused, Dr. Capps took upon himself the task of removing the femur and replacing it with a broomstick. But the prosthesis was not a perfect facsimile and the family brought charges involving a claim for $600.

Dr. Capps was discharged from the Hospital but reinstated the following day when Dr. Shattuck paid the claim out of his own pocket. The East Medical Service chalked up an autopsy record of 96%, as compared with 95% for the West Medical Service.

Following the House Pupilship, Dr. Capps added his shingle to that of several colleagues on Marlborough Street in Boston. He sat about for several weeks with only a single applicant for his services, a woman seeking an abortion.

* * *

Eventually Dr. Capps proceeded to Chicago where, with no medical contacts, he set out his shingle in "an office over a drug store," obtained an appointment from Dr. Lyman at Rush Medical College, and began his life's career in medicine.

Within a short time he organized the first blood course in Chicago and discovered the first case of hookworm infection in the area. These activities so impressed Dr. Frank Billings that Dr. Capps was invited to join him, first in his clinic, then as a resident in his house and as assistant in his private practice. Only some years later did Dr. Capps produce a much faded and crumpled letter of introduction from Dr. Shattuck to Dr. Billings!

It was the custom at that time for young American doctors to study in Vienna. So in 1902 Dr. Capps took a year off. . . . On returning to America, he rejoined Dr. Billings and his lifetime associate in practice, Dr. Joseph Miller. He was appointed assistant professor at Rush Medical College and taught medicine at Presbyterian Hospital.

Later he joined the staff of St. Luke's Hospital, where he became senior physician and later trustee. . . . With the opening of the University of Chicago Clinics in 1928, he became clinical professor until his academic retirement in 1946.

Despite a demanding private practice, Dr. Capps carried on a productive research and teaching program.

Dr. Capps' life combined many virtues. He was a kind and generous person, always willing to give to others and anxious to carry his full measure of work. He got along well with patients and he was respected by his confreres.

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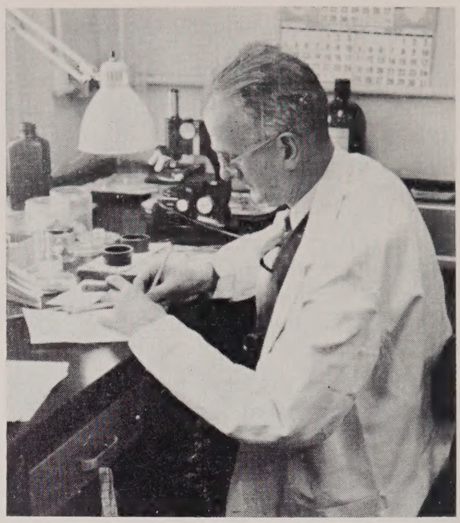

Werner Mueller, MD

(1892-1964)

The death of Dr. Mueller, former Director of the Mosher Laboratory, from a heart attack just after his annual windjammer cruise off the Maine coast removed from the Boston scene a unique, fascinating, and dedicated personality.

He was born in Berlin. After graduation from the Lyceum, he worked for the Pfau Surgical Instrument Company, and in 1913 came to New York as its representative. In 1922 he moved to Boston and worked for the E. F. Mahady Company.

His keen interest in science led him to study books on anatomy and especially otolaryngology. He enrolled in the Boston University School of Liberal Arts, and progressed to the MD degree in 1930. He interned at the Cambridge Hospital — now Mount Auburn Hospital.

His special knowledge of otolaryngology led to a residency at the Massachusetts Eye and Ear Infirmary, and to a subsequent Harvard appointment that gave him the opportunity of assisting Dr. Harris P. Mosher in the famous course on the anatomy of the sinuses. It led also to appointments as an examiner in histopathology on the American Board of Otolaryngology and as an instructor in the course on histopathology given by the American Academy of Ophthalmology and Otolaryngology.

Although possessed of great knowledge and skill, he was not endowed with the temperamental bent of the surgeon. In those pre-antibiotic days, when infection was the major otolaryngological problem, major surgical procedures were agony to him. Fortunately, his friends steered him into new fields.

In 1940 the Infirmary assigned Dr. Mueller to an experiment to determine if its service to the hard of hearing could be improved. He worked with Dr. Ruth Gilder, and together they proved that pre-school children could be fitted with, and would wear hearing aids.

They also disproved the fallacy that lip reading should not be started until the child reached the age of 10 or 11. Their work led to the establishment of the Winthrop Foundation at the Infirmary, the first audiometric clinic in the United States. This work also led to a hearing aid service — again, the first in Boston by a competent otologist.

At that time one of the major problems of the Infirmary in establishing its own identity lay in the realm of pathology. During the war years it was necessary to rely on the general pathologists, but delays, lost specimens, and lack of a teaching program for residents necessitated a change.

Unable to find a pathologist willing to specialize in otolaryngological pathology, Dr. LeRoy A. Schall, Chief of Otolaryngology, decided, with the approval of the Board of Managers, to make a pathologist out of an otolaryngologist. Accordingly, Dr. Mueller was appointed Director of the Mosher Laboratory. Here he found the work he loved most.

He quickly earned the respect of the entire staff. Every house officer learned histopathology. Every resident had to review every biopsy and every specimen that he operated on, and received a slide for his own collection.

With the great increase of tumor surgery, the laboratory service under Dr. Mueller was exceptionally efficient. No longer was the patient sent home to wait for the pathology report.

After his retirement in 1960, Dr. Mueller continued to serve the Infirmary as Senior Consulting Pathologist. In the summer of 1963 Dr. and Mrs. Mueller journeyed to Germany, which he had not seen for fifty years. He recorded this trip beautifully in Agfachrome, and paid homage to Beethoven by photographing his birthplace.

His many interests extended into such fields as Egyptology and Bay State history, music and telescopy. He played double bass in the Harvard Musical Association.

He will be remembered above all as a stimulating and devoted teacher and friend.

LeRoy A. Schall, MD
Chief of Otolaryngology,
Emeritus
Massachusetts Eye and
Ear Infirmary

The AMA...

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places the responsibility for that patient's health clearly on the shoulders of that physician.

Second, it could acknowledge the fact that American society has decided, rightly or wrongly, that government, and particularly federal government, will play an increasingly important role in the financing of health care.

Third, it could prevent the government's role from becoming completely dominant by recognizing the principle of government partnership with private enterprise. There are numerous examples of such partnership in the health field and out of it. A corollary to this understanding makes a clear distinction between federal *support* and federal *control*; the two are not necessarily synonymous.

Within these concepts the AMA might enter boldly into a working agreement with government to provide for the American people that form of insurance against illness which they seem earnestly to desire.

Resolutions in Miami

During the AMA meeting in Miami last December, attempts were made to persuade the House of Delegates to take some action toward government partnership with private enterprise. Resolutions were introduced by the delegates from California and the District of Columbia. To me, however, the most interesting proposal came from Michigan. It was introduced by Dr. Donald Sweeny of Detroit, an MGH alumnus (West Surgical Service, 1941). It was Resolution 38 and read as follows:

"Whereas, Prepaid health insurance has proved to be an efficient and economical method of providing the best in medical care; and

"Whereas, It is appropriate for the medical profession to propose constructive, progressive and realistic action; therefore be it

"Resolved, That the American Medical Association support the principle of partial government subsidy of privately administered prepaid medical care through the medium of income tax credit for individuals below a defined income tax level or subsidy in full for eligible persons whose income is below a taxable level; and that benefits for the latter group under such insurance contracts be those normally provided for the average income group in the area in which they reside."

Here is a simple plan which, though difficult of implementation, should not be beyond the intellectual capacity and ingenuity of this nation. It would provide a private, impersonal, fair yardstick for gauging the need of an individual for government assistance in caring for his health needs. It would remove the stigma of "welfare patient" from a substantial segment of our sick.

Bureaucracy would be held to a minimum; the principle of voluntary health insurance would be preserved. And most important of all, the individual doctor-patient relationship would be maintained and in fact strengthened.

Australia, a country of about 10 million people, broke away from a system of state medicine in 1950 and instituted a somewhat similar scheme. The government's share in this system of providing voluntary health insurance coverage is administered by 17 employees!

What happened to the Michigan resolution? It was referred to the Reference Committee on Legislation and Public Relations, whose chairman moved (and the House of Delegates voted affirmatively): "That no action be taken . . ."

The resolution from the District of Columbia, which proposed that the federal government buy voluntary health insurance for the elderly, was voted down.

In place of the California resolution, which was a watered-down version of the Michigan proposal, the Reference Committee offered a substitute motion which resolved: "That the House of Delegates of the American Medical Association urge its component associations to stimulate the state and local governments to seek the fullest possible implementation of existing mechanisms to the end that everyone in need, regardless of age, is assured that necessary health care will be available." This was passed.

Following this action, representatives of the delegations who introduced the "radical" resolutions rose to pledge unswerving loyalty to the party line. This points up a tragic facet of AMA organization: While it is a truly democratic association and its legislative activities are patterned after those of Congress, it really needs something like a two-party system.

There is a minority of physicians who would like to see the AMA take a giant step forward in this area of financing health needs. If this minority had some sort of rallying point, it might as the "loyal opposition" modify, if not reverse, some of the conservative thinking of the House of Delegates.

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Nursing Problems

Education for Service

Miss Ruth Sleeper, Director of the MGH School of Nursing and the Nursing Service, delivered an address entitled "Problems Facing Nursing in the United States" last October 3 at the Albany Medical College, when it celebrated its 125th anniversary. On this occasion she was one of 12 who received honorary degrees.

As the problems of nursing are growing more acute, a digest of Miss Sleeper's discourse is herewith presented.

Early Unity of Nursing

Nursing problems in hospitals were relatively simple in 1860, when Florence Nightingale established the first training school for nurses at St. Thomas's Hospital in London, and in the early 1870s, when similar hospital schools were begun in Boston, New York, and New Haven. Miss Sleeper described them as follows:

"There was no separation between the plan for training of the nurse and the plan for patient care. Nursing was a totality. The pupil . . . nursed and ergo she learned."

The pupils were required to perform many hours of labor with only a few hours devoted to classes, and thus the training school was a financial asset to the hospital.

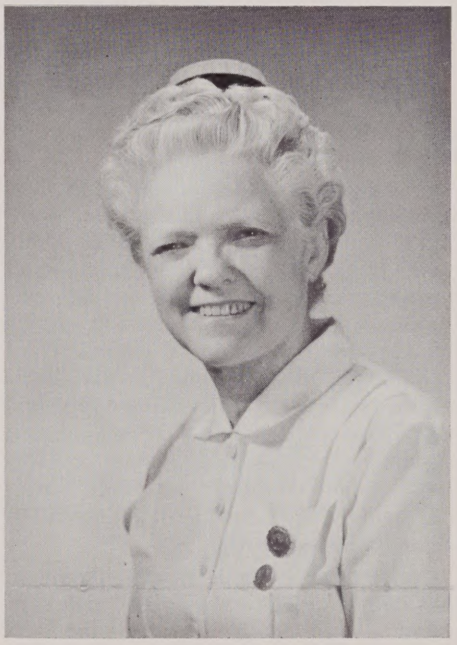
Dichotomy of Nursing

The educational deficiencies of the training school system became so apparent, however, that in 1909 the first baccalaureate course of nursing was established at the University of Minnesota. The subsequent growth of degree programs in nursing had a rather unexpected effect, described by Miss Sleeper as follows:

"Education for nursing had become . . . a separate entity, distinguishable from nursing service or patient care by a different philosophy and by objectives specifically related to a student-centered curriculum. The totality that was nursing was broken apart, each severed part striving to find its own place; each having lost something of value, but too concerned with newfound responsibilities and opportunities to be fully aware of the loss. . . .

"As long as this structure of Nursing exists as a divided structure, so too will there be problems to face. Education planned without regard for patient care needs will inevitably produce a practitioner unready, unwilling, or unfitted to adjust to the service demands. Conversely, the nursing service which lacks communication with on-going knowledge and the resources of education can grow so service-centered, so involved with the work and demands of other disciplines that the nursing service itself becomes static, moving more at the will of the stronger members of the team, and failing to contribute its essential share to the patient care.

"Regardless of the pressures for more and more nursing care, regardless of the insatiable demands of education today, some way must be found to bring 'gown and uniform' into the communication which will not only bring 'gown and uniform' into the to undergird the other, giving guidance to Education and strength to Service."



Ruth Sleeper, RN, SD (Hon.)

Miss Sleeper then turned to curricular problems of the diploma schools of nursing, most of which are found in hospitals:

"Who can say now how the diploma school, isolated from this stream of general education, can keep in step, can modify its program to challenge this new student, and simultaneously meet the advancing system of medical care. I do not question whether the diploma school will survive. I do question by what means the diploma school will meet the demands for teaching which the new students will make. I wonder how the diploma school can expand its program to provide the science basis the nurse should have in the future medical program."

Shortage of Supervisors

Another acute problem is the lack of trained supervisors, concerning which Miss Sleeper stated:

"One of the greatest deterrents now and perhaps in the future to the rapid expansion of existing schools or to the development of new schools is the lack of prepared teachers of nursing. . . . The shortage of leadership in the nursing service should be viewed with real alarm. Of what value is good education in the classroom if the clinical practice field does not enjoy the supervisory skills necessary for sound organization and good patient care?"

Miss Sleeper probed to the core of the leadership problem in this passage:

"Why do nurses going for advanced study not choose to get the necessary preparation for hospital nursing administration and supervision? . . . The nurse in educational administration, finding her philosophy in harmony with that of her university co-educators, attains a considerable independence of decision and action. The public health nurse, working within the framework of medical and agency policy, operates with a large degree of independence in her decisions and her plans for family care and teaching.

"In contrast, the nurse administrator, working with hospital administrators, medical staff, and, in teaching hospitals, with the medical interns and residents, finds herself all too often in a semicompetitive situation with doctors unwilling to relinquish responsibility, even for activities for which they cannot find the time or are themselves less well adapted to do.

"There is, too, the hospital administrator who, having employed the nurse director to run the nursing department, is unready for his own reasons to relinquish the authority commensurate with the delegated responsibility."

Solutions

Miss Sleeper indicated some lines of procedure in solving these problems:

"Experiments indicate that a nurse working as a specialist can integrate all facets of nursing care, serving as the hospital staff nurse, as the private nurse, and in pre- and post-hospitalization as the public health nurse. Such a nurse works with hospital administration, medical staff, and nursing staff, and, as necessary, outside the hospital with other community facilities. She brings a wholeness to patient care. The very success of such experiments demonstrates what can be achieved with the right preparation of the nurse when she has commensurate authority to plan, and to make decisions."

Miss Sleeper concluded: "The future holds no hope of improvement to decrease the instability of the nursing service save through a combined attack by hospital administrations, staff doctors, nurse educators, and nursing service administrators on the present ills . . .

"Free communications bring mutual benefit. There will be a free flow of knowledge, of stimulus, and I hope of people themselves contributing to the advancement of both Service and Education. . . . Nursing is like an hourglass in which first Education and then Service each adds its contribution with the shifting passage of time."

Lowell Lectures . . .

Continued from Page 1

ing Hospital and the Medical School" (Feb. 3).

ROBERT H. EBERT, MD, Jackson Professor of Clinical Medicine, HMS, and Chief of the Medical Services, MGH: "The Dilemma of Medical Teaching in an Affluent Society" (Feb. 10).

PAUL S. RUSSELL, MD, John Homans Professor of Surgery, HMS, and Chief of the Surgical Services, MGH: "Postgraduate Surgical Education: Some New Problems" (Feb. 17).

JOHN H. KNOWLES, MD, General Director, MGH, and Lecturer on Medicine, HMS: "Education, Service and Money in Hospitals" (Feb. 24). At the Prudential Center.

Dr. John T. Murphy, Director of Pharmaceutical Research and Development, has left MGH to fill a top managerial post with the Boston branch of Davies Rose and Company, Ltd. His duties have been absorbed by Mr. John W. Webb, Director of the MGH Pharmacy. When leaving, Mr. Murphy was presented a citation in recognition of his 46 years of service to the Hospital. He was Pharmacist-in-Chief from 1944 to 1959. In 1955 he received an honorary degree of Doctor of Pharmacy from the Massachusetts College of Pharmacy.

Service League Expands

By Mrs. Avery D. Weisman

Much of the success of the MGH Service League is due to women of outstanding leadership and dedication to the aims of the Hospital. The League has always found members with these qualities to serve as its president.

One of these women is the wife of Dr. Henry Dunster Howe of the Dental Service. Mrs. Howe was president of the Service League from May 1962 to May 1964, and vice president for the two preceding years. During these four years the organization expanded its activities in many directions.

As a prelude to more effectiveness, its name was changed in 1961 from the Staff Wives Association to the more descriptive Service League. This was done to encourage women outside the hospital family to become active members. More than 60 such women have been attracted to the group.

The first total service project of the League was inaugurated in 1953 by the then president, Mrs. Oliver Cope. The Reception Center for International Visitors is still a familiar landmark near the White Building Lobby. It is the core of voluntary service within which many recent projects have taken form.

Mrs. H. Dunster Howe

As a Reception Center Volunteer, and as legal adviser to the foreign visitors who came to the Center for help, Mrs. Howe became well indoctrinated and thoroughly conversant with the needs of the Hospital and the ways in which they could be met.

In 1962 the Service League responded to the urgent need for an information desk service in the Brick Corridor. Mrs. Howe recruited members of the League for this volunteer job, and during the following year helped to organize a similar service in the Clinics Building corridor. At this time, in conjunction with the Ladies Visiting Committee, Mrs. Howe also implemented a plan for serving coffee during the Amputation Clinic and Rounds.

Largely because the strength of volunteer auxiliaries is reinforced in direct ratio to the number of members participating in each project, cooperation between the Ladies Visiting Committee and the Service League has effected one of the most successful innovations within the Hospital. Under the guidance of the late Mrs. Charles Burbank, a former Service League president, a joint Coffee Shop Committee investigated the feasibility and recommended the installation of the new Coffee Shop.

Mrs. Alfred Kranes, who succeeded Mrs. Burbank as president, continued to promote this project and accepted the responsibility of providing a large corps of volunteers from both auxiliary groups to staff the Coffee Shop. During Mrs. Howe's presidency the Coffee Shop became a reality in January of 1964.

To encourage further cooperation, Mrs. Howe recommended that two Distaff Club members be invited to sit with the Executive Board at its monthly meetings. This was approved, and has been in effect for the past two years.

In addition, members of the Distaff Club and the Ladies Visiting Committee are invited to the Midwinter Luncheon. When Mrs. Vincent Perlo was president she initiated this pleasant way to meet and chat with other volunteers, and to learn more about the many interesting phases of hospital experience from the luncheon speaker.

Carrying this overall plan for intrahospital cooperation into still another area, Mrs. Claude Welch, the current president of the League, has suggested an annual event to bring the entire hospital family together in a setting outside the Hospital. To this end, Mrs. Welch is now investigating the possibility of an MGH Pops Concert night at Symphony Hall.

While a student at Mount Holyoke College, Mrs. Howe spent her junior year in Geneva as an International Student. Her interest in political science led her to Boston University Law School and graduate work at George Washing-

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Aloha Miss Barbour

A farewell dinner in honor of Miss Josephine C. Barbour, retiring Chief of Social Service, was held on December 15 at the Harvard Club with approximately 300 guests in attendance. It was a poignant moment in MGH history.

Dr. Edward L. Young, Chairman of the Social Service Advisory Committee, presided as toastmaster. The list of speakers included Dr. Nathaniel W. Faxon, Director Emeritus of MGH; Dr. Alfred L. Frechette, State Commissioner of Public Health; Dr. Edward F. Bland, former Chief of the Cardiac Disease Unit, MGH; Mr. Francis W. Hatch, Associate Trustee; and Dr. John H. Knowles, General Director.

Among the honored guests at the head table were Miss Harriett Bartlett, Miss Isabel Whiting, and Miss Dorothy Kellogg, all former members of the Social Service Staff, and Miss Eleanor Clark, who is Miss Barbour's successor.

Miss Barbour received a beautiful orchid lei from Dr. Knowles in the Hawaiian mode — with a kiss planted on both cheeks. The lei had been flown here from Honolulu through the courtesy of Miss Miriam Tom, a former member of the Social Service Staff.

The lines of poetry in the adjacent column constitute the envoy to a long ballade in free style, composed by Mr. Hatch and read by him at the dinner to Miss Barbour.

Miss Barbour at her reception tea in the Walcott House on Dec. 30, 1964, flanked by Dr. Edward Bland (left), who presented her an MGH citation, and Dr. Edward Young, Chairman of the Social Service Advisory Committee.

Service League . . .

Continued from Page 9

ton University School of Law. During World War II she was a lieutenant, j.g., in the Naval Reserve, and was assigned to the Casualty Office in Washington, D.C.

As an assistant attorney general of Massachusetts, Mrs. Howe interviewed survivors of the 1942 Cocoanut Grove fire who were treated at the MGH. Her impression of the atmosphere of total concern for the patient which pervaded the MGH Staff inspired her later to work toward bringing together the many and varied interests within the hospital volunteer groups. During her term of office the Service League has prospered in its expanding commitments to serve the MGH.

Miss Evelyn Dunn, Coordinator of Communications, cordially invites all members of the Staff to attend the weekly "open house" in the fascinating telecommunications unit on the top floor of the White Building. This occurs on Wednesdays at 10 AM and 2:30 PM. Visitors may discuss their specific telecommunications problems with the experts of this unit while being served coffee.

Dr. John Kelly, who established the MGH Podiatry Clinic in 1929, has retired after 35 years of service. **Dr. John McLean** (Doctor of Surgical Chiropody) has taken his place, and is assisted by three other podiatrists: Dr. Homer Squires, Dr. Donald Donovan, and Dr. Edward Bloom. The Podiatry Clinic is held on Thursday mornings at the Orthopedic Clinic.

To Josephine

Dear Josephine —
in your long career
many a hat
you've worn, my dear.

Our MGH cap
we've redesigned
to symbolize
and bring to mind

the pesky things
you've never shirked,
the angel's wings
you've worn to work!

Your Merlin's wand
whose magical touch
to patients' despair
has meant so much.

Your sense of humor,
your timely jest
that put fatigue
and care to rest.

Here in this hat,
in ribbon and braid
you'll find the tools
that serve your trade.

Dear Super Chief,
receive them now,
our love and laurel
to deck your brow.

F. W. H.

Dr. Fritz B. Talbot, Chief of the MGH Children's Medical Service from 1910 to December 1931, died on October 31, 1964. He was Clinical Professor of Pediatrics Emeritus at Harvard. He was also a noted artist. His son Nathan is the present Chief of the MGH Children's Service.

Dr. Joseph S. Barr, Chief of the MGH Orthopedic Service since 1946, and the John B. and Buckminster Brown Professor of Orthopaedic Surgery at Harvard since 1947, died on December 6, 1964 from emphysema and its complications. An article about Dr. Barr has been submitted to *The NEWS* by Dr. Edwin F. Cave.

Mr. Nile Root, nationally known photographer of Denver, Colorado, and director of medical illustration at the General Rose Memorial Hospital there, recently exhibited his outstanding prints in a one-man show at MGH entitled "Sight and Insight," sponsored by the Visual Education Services.

Dean Berry . . .

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John Knowles, who has won his spurs as a community leader, is now endeavoring with the help of the MGH Trustees and Staff to give the MGH, as an institutional whole, a heightened sense of responsibility for community health. The 1963 and 1964 Lowell Lectures at the MGH brought into sharp focus the place of the behavioral sciences in medicine, the urgency of fostering the better continuing education of the physician, the vexing problem of rising medical costs for the consumer, and — above all — the need for the Hospital to enlarge its horizons. That the MGH has had the vision, courage, and wisdom to re-examine its place in society, will bring untold benefits to medicine.

MGH-HMS Partnership

The incessant demands of society today for more and better medical care call for bold action by the MGH in partnership with the Harvard Medical School. Much uncertainty continues to exist about the role of the university as an instrument for bringing about social change. There are those who eschew Clark Kerr's concept of the "multiversity . . . as a central force of our society," preferring Cardinal Newman's "Idea of a University" that saw "useful knowledge as a deal of trash." Yet, surely, the university's role is becoming ever more dynamic. Whether universities come to play the major role in the community's health that they now play in the realm, say, of physics or economics, will depend in large measure on the policies, actions, and effectiveness of the teaching hospitals.

A tremendous obligation to shape the character of tomorrow's medical care and services devolves upon the MGH because it is one of the world's greatest teaching hospitals. Noblesse oblige!

The clamorous demand to create a healthier society, not merely to cure particular diseases, is now a social and political fact. However much we may or may not like this fact, we must deal with it. In my 1952 talk, mentioned earlier, I reminded my colleagues that, "if we do not do some hard thinking and acting right now, someone whom we believe to be less competent than we, will do the acting for us without adequate thinking. If we believe that we are the best architects, it is up to us to produce the plans."

Enlightened Planning

As I prepare to retire from the deanship of the Harvard Medical School, I would like to be able to say that adequate plans have been made by medicine to meet society's demands. Such is not the case. We may hope that this failure is attributable more to the complexities of the problem than to the limitations of the architects. I am not so sure.

Be that as it may, the fact is that neither the Harvard Medical School nor the MGH can afford to be swept along by events. The School and the Hospital must bring the behavioral sciences more adequately into the framework of medicine. We must take better advantage of economists to help us find solutions to the problems of hospital deficits and the soaring costs of patient care. We must develop better plans for predoctoral and postdoctoral education that focus on the patient in his total setting. We must find out promptly how to make better provision for preventive medicine, chronic illness, and mental illness in an urban teaching hospital.

As physicians, as teachers, as scientists, as trustees, and as administrators, we cannot reform medicine *and* society — or even medicine *in* society. But we can try! And, what's more, it will be both exciting and rewarding to do so.

Dean Berry is a member of the MGH Committee on Research.

Dr. Capps . . .

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He played golf as he did everything else, for the fraternity of the game rather than for the score. But above all, he was dedicated to the highest ideals in medicine, believing with Hippocrates that the practitioner of medicine must be a model of integrity and true unto himself.

Professor Francis O. Schmitt, Chairman of the Neurosciences Research Program of the Massachusetts Institute of Technology, and a member of the Board of Trustees of the Massachusetts General Hospital since 1947, was awarded the degree of Doctor of Medicine (Honorary) by the University of Göteborg, Sweden, on October 17, 1964.

His citation in Latin read as follows: *Salve, vir doctissime, qui nobis viam aperuit ad naturam texturae conexivae et motuum in nervis molecularium cognoscendam.*

The AMA . . .

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Lacking a political grouping of any type within the AMA, individual dissatisfied physicians tend to drift away from this organization, which is after all still one of the most respected medical associations in the world. This tendency is not good for the doctors, nor medicine in general, nor the public and its legislative representatives.

Most citizens and legislators are bewildered and uneasy. They feel that the present system of financing medical care, regardless of the glowing terms in which the AMA presents it, is not entirely suited to the needs of the people. They want change, but they would like to see physicians *lead* the way. Why can't we?

A new look is blossoming all over the Moseley Building under the inspiring direction of Dr. Ellsworth T. Neumann, Administrator, and Mr. Paul Lancaster, consultant from the Paine Furniture Company. The principal change is the new Lecture Hall Lounge. Come and see!

The Archives Room is undergoing a thorough transformation. A bronze chandelier, a red carpet (wall-to-wall), and blue drapes are being introduced. The mahogany table and the Winsor chairs are being refinished.

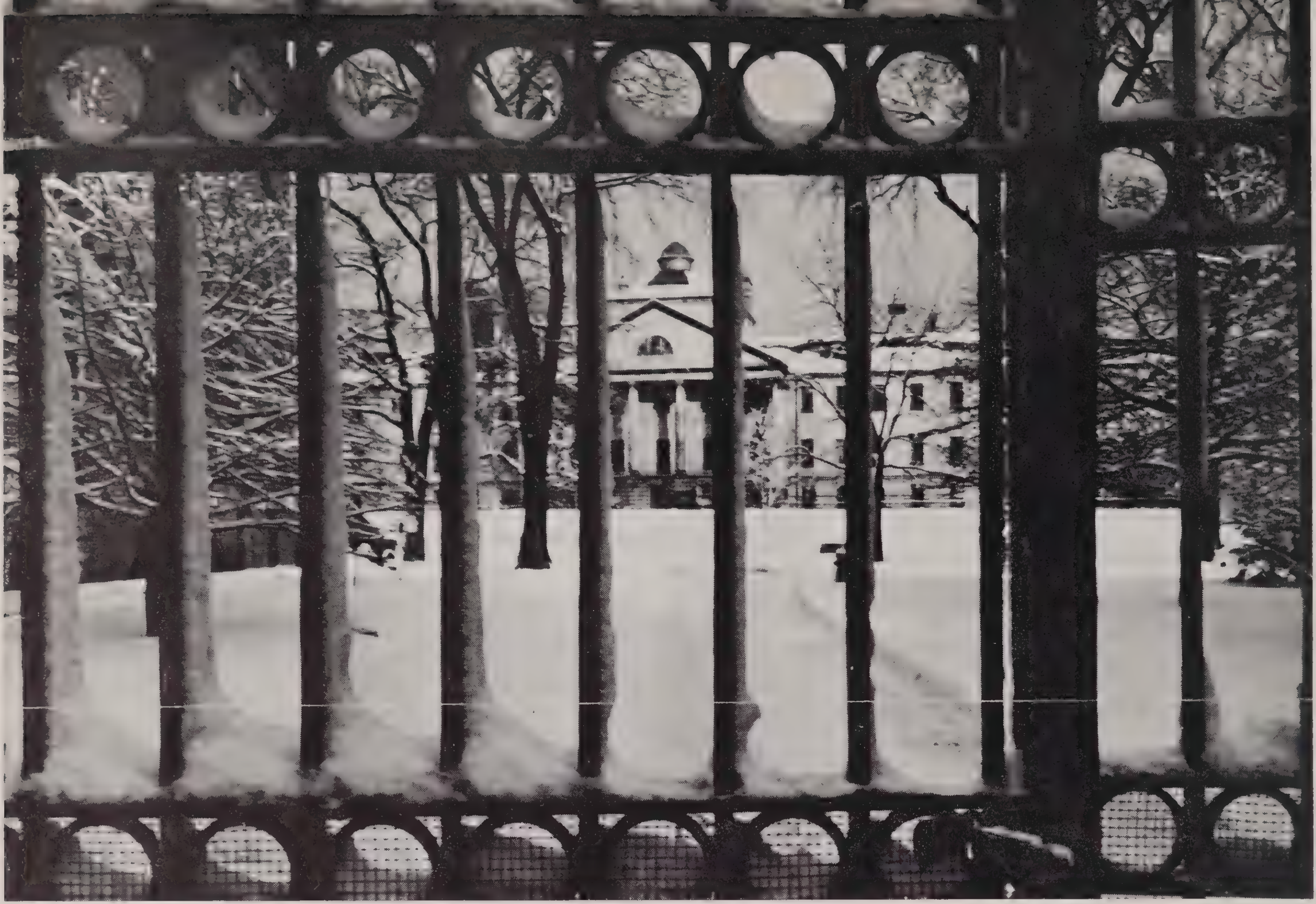
Dr. Ebert . . .

Continued from Page 2

Perhaps the most important part of all this is the basic recognition that ambulatory care has been the neglected stepchild of the hospital as compared to the ward service, and that the time has come to provide equal rights for the development of this important medical area.

Once again, let me say how pleasant it is to be here and to participate in the affairs of the MGH and Harvard medicine.

Dr. Ebert is Chief of the Medical Services, MGH, and James Jackson Professor of Clinical Medicine, Harvard Medical School.



Photograph of the Bulfinch Building and yard, taken by George Burton of the Radiology Department on Dec. 22, 1945 from a position on the former Fruit Street extension. The iron gate in this view was moved southward to Parkman Street in 1953. This photograph is one of a collection of Mr. Burton's works, which he generously donated recently to the MGH Archives. (Watch for his exhibit in the Archives display case near the General Store.)

MGH Ether Dome Named as National Historic Site

The Ether Dome of the Bulfinch Building, which functioned as the surgical amphitheater of the MGH from 1821 to 1868, has been designated a National Historic Site of scientific interest by the U. S. Department of the Interior, following a recommendation of its advisory board. Dr. S. Sydney Bradford, an official of the National Park Service, had inspected the Dome in August 1963.

It appears likely that a special plaque will be unveiled in the Dome on next Ether Day, October 16, 1965 — 119 years after the historic demonstration of ether anesthesia in the amphitheater by Dr. William Morton and Dr. John C. Warren, observed by members of the MGH Staff, the Harvard Faculty, and prominent physicians of Boston and vicinity.

Robert Hinckley's famous oil painting of that event still hangs in the Lecture Hall Lounge of the Moseley Building. Truly magnificent color prints of this painting are available from the photographic studio of George M. Cushing, Jr., 306 Newbury St., Boston 02116 (tel. 536-4750).

Monochrome prints of the Ether Dome and the Bulfinch Building may be purchased in the MGH Medical Photography Unit. Copies of the Sears Gallagher etching of the Bulfinch Building are available at the store operated by the Ladies Visiting Committee.

Treadwell Library

For 68 years the Library was located in the Bulfinch Building directly under the Ether Dome — on the first floor until 1893, and thereafter until 1916 in what is now the Medical Staff Room on the second floor. Its early character was described thus by its librarian, Mrs. Grace W. Myers, in 1899:

"It is large and sunny, facing the south, and looking out upon a beautiful lawn ornamented with graceful old elms. Three arched alcoves open out of the main room upon the north side . . . Upon the walls hang portraits of men who have contributed largely . . . to the great work of the Hospital. Two of these are from the hand of the famous Gilbert Stuart. A number of busts stand about the room . . . Thus, even in our small library, literature, art and science have taken each other by the hand, and are serving to make one of the pleasantest rooms for reading and study to be found in the city of Boston."

Mrs. Myers further described the Library of the 1890s when writing her MGH History (1929):

"It was handsomely furnished with a ten-foot black walnut table, and chairs to match. . . . Woodwork was painted white, and the walls a dull Pompeian red; a handsome rug covered the center of the floor. The long windows at the front admitted a flood of sunshine, and the Library soon developed an atmosphere all its own."

It is pleasant to report here that the handsome walnut table and chairs are now being repaired and refinished for at least a century more of use within the Hospital.

The NEWS of MGH

Vol. 24, No. 2 Boston, Massachusetts March 1965

Surgical Lasers in Practice and In Prospect: An Appraisal

The unremitting hazard to medical investigators in laser laboratories is that the laser is now so "in" that it cannot be long before the reaction occurs and it will be just as "out." After the disenchantment perhaps only a few of the many potential biological uses will actually be improvements on older methods. The practical issue today is whether we can foretell which of the uses will prove unique and useful for solving current problems.

An outstanding property of the laser is its ability to provide in a conveniently handled package a source of radiation many times more intense than that of the surface of the sun and focusable into a spot less than 1 micron in diameter. To understand how this can be, it is necessary to know something of the principle on which lasers operate.

Atoms normally exist in a ground-state energy level, but they may be excited by bombardment with photons to higher levels. When they fall back to the ground state, they give off photons. In familiar terms this spontaneous emission is seen as luminescence. Statistically, a molecule has just as much chance of being excited to the higher energy levels as it has of falling back to the ground state once it is excited, and so there can never be more than 50% of the total atomic population in the excited state at any one time. Thus, in most systems there is no way to store energy and to release it on demand.

Certain substances such as rubies, however, have another band immediately below the excited state into which atoms can tarry before dropping all the way back to the ground. The important characteristic of this band is that the hold-up period is relatively long compared with existence in the other excited bands. Hence, the population of excited atoms can build up in this intermediate or metastable state until there are more atoms in an excited state than are in the ground state, and a population inversion exists.

If the atoms in the metastable state spontaneously fall to the ground-state and give off their energy in the form of photons, the increased energy of emission resulting from the temporary storage is not impressive. But if, instead of allowing probability to determine which of the atoms will revert to the ground state, the atoms in the metastable state are bombarded by photons of a specific frequency, they will drop to the ground state giving up their own energy in the form of a photon, and they will also emit the impinging photon. These two photons can then trigger the release of four photons, and so on in a geometric progression to result in a tremendous release of energy; this process is called stimulated emission in contrast to spontaneous emission. The laser in broadest terms is a device for achieving light amplification through the stimulated emission of radiation.

Besides being released at tremendous energy levels, the light generated by a laser is almost strictly parallel and in phase. When channeled into optical systems it behaves uniformly (coherently) so that it can be focused, subject only to the diffraction limits of the optical path. This means, for instance, that a laser actually focused through a telescope to shine on the moon covered a spot of only two miles diameter, but that if a searchlight were powerful enough to be focused on an object so far, its spot by contrast would cover over 2000 miles. At the other extreme of distance, it means that a laser focused through a microscope can have all of its energy concentrated in a spot

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CHILDREN'S CLINIC

New Children's Ambulatory Care Unit
(See story on Page 4)

Crisis in the Teaching Hospital

The 176 hospitals in Massachusetts contend with many problems common to all of them. Those relatively few hospitals which are affiliated with the three medical schools in this state also face special problems that are not found in community or proprietary hospitals. These special problems provided the principal subject matter of the course of four well attended lectures given by MGH in February under the sponsorship of the Lowell Institute of Boston.

Dr. Glaser

In the first Lowell Lecture, Dr. Robert J. Glaser, President of the Affiliated Hospitals Center, Inc., and Professor of Social Medicine at the Harvard Medical School, traced the historical development of MGH-Harvard relations from 1811 to the present, showing how the vicissitudes of each institution affected the other one. He also sketched the development of teaching hospitals into community health centers, stating:

"These medical centers are expensive, but they are worth the cost in terms of saving lives, restoring people to their jobs and serving the community. . . ."

"There has been a steady increase in the use of emergency wards and clinics at large teaching hospitals, in large part because of their round-the-clock staffing and availability, and this trend will continue. . . ."

"The costs of teaching hospitals are high because of the many complex problems being dealt with. The cost can be expected to remain relatively high because the technology involved is expensive and development of new processes always is costly."

Dr. Ebert

In the second Lowell Lecture, Dr. Robert H. Ebert, Chief of the MGH Medical Services, came to grips with the dilemma of medical teaching in an affluent society:

"Medical educators have been so preoccupied with the impact of the current scientific revolution in the teaching of medicine that they have had little time to consider the importance of a concurrent social revolution which may be equally important in altering the traditional ways of teaching medicine. There is probably not a medical school in the country which has not made drastic alterations in its curriculum to meet the needs of a changing and enormously expanding body of scientific knowledge. Few have given the equivalent thought to the changing nature of the teaching hospital and fewer still have thought of the changing pattern of medical care as a factor to be considered in planning the education of medical students, interns, and residents."

Dr. Ebert advocated the extensive use of private patients in the teaching program, recognizing that a majority of patients actually welcome the prospect of having their medical problems reviewed not only by their own doctor but also by a team of doctors. He then raised the interesting question:

"What then stands in the way of freely using private patients in the same manner that ward patients are used? One factor is the reluctance of the patient's private physician to relinquish any of his authority in the care of the patient. He has been taught to assume responsibility and he is reluctant to share it. . . . A second factor is the doctor's fee. If the physician does not assume full responsibility for the care of the patient in the hospital, he wonders if he is justified in sending a bill."

Among Dr. Ebert's answers to this question was the following point: "All members of the staff must be teachers and be involved in teaching. It is anticipated that they will be excellent physicians, but this alone is not enough to justify membership on the staff."

Dr. Russell

In the third Lowell Lecture, Dr. Paul S. Russell, Chief of the MGH Surgical Services, discussed "imminent changes in the setting in which surgery is taught in the teaching hospitals." He went on to say:

"The hospital is increasingly more busy and runs a significantly higher occupation rate, or census, of patients than it did only a decade ago. The operating rooms, constructed for a less surgically oriented institution, are under heavy use and there is pressure to increase their number, and their readiness to provide for complicated surgical operations. Meanwhile, that segment of the hospital traditionally devoted especially to teaching, namely the ward surgical services, has not increased in size. With the tremendous growth in activity of the emergency ward through its attractiveness as a center for the prompt care of acute problems at any time, the ward services continue at a level of activity which is roughly stable, perhaps half of their patient population being derived through the emergency entrance of the hospital. Long waiting lists of indigent patients hoping to be admitted to teaching hospitals for elective operations are disappearing."

"We have quite enough patients but we need an adjustment in the mechanism of care of some of them. What are the possibilities? I believe they can all be brought under three headings: (1) Increased emphasis on teaching on our private services. (2) Some means of introducing patients of the private type directly on to existing teaching services. (3) The establishment of a new private service especially oriented toward teaching."

The desirability of participation of house staff in the surgical treatment of private patients is aptly pointed out in this passage:

"It must be emphasized that even in the operating room a single individual cannot perform an operation unaided. This is more and more striking today when in some procedures more than one incision may actually be necessary at once and the patient's life may depend upon the functioning of one or more machines operated by anesthesiologists or heart-lung pump technicians, all of whom, reliable, assume a certain share of the task. This environment is splendidly suited for the gradual shifting of increasing amounts of responsibility to highly competent and carefully observed younger colleagues. The standard of competence of the entire team is the concern of the senior man; the direct responsibility for the individual details of procedure can and often must reside with its individual members."

Dr. Knowles

In the fourth Lowell Lecture, Dr. John H. Knowles, General Director, presented a summation of his extensive studies of the economic and sociological factors that have produced the present crisis among teaching hospitals.

In his introduction he stated that generally the teaching hospitals "are the ones which carry the greatest burden of caring for the indigent sick and therefore face the constant crisis of financial disaster. . . . The costs and charges of the teaching hospital are the highest of all hospitals, and the explanation, though constantly sought, is still only poorly understood. The teaching hospital is attracting more and more the complicated and severely ill patient or the patient who requires the care of a specialist, special procedures, and the massive and expensive technical facilities of the large urban hospital. The load it shoulders for the community and its smaller, nonteaching hospitals is becoming increasingly heavy."

"Individuals and the increasingly powerful organized purchasers and consumers of medical care (labor unions, Blue Cross groups, state and federal welfare agencies) have scrutinized these inexorably rising costs and in many instances have forged improvement in hospital function. In some instances, chronic harassment, personal or political gain, and the attainment of short-term, vested interest have been the sole ends."

Dr. Knowles concluded: "Teaching hospitals are islands of excellence in medicine upon which the community and the nation depend for the setting of standards in the quality of patient care, the development and training of all those people involved in health services, and the conservation and expansion of knowledge of disease through medical research. The price we pay for our health today in these bastions of caring is high, but the product is precious."

Dr. Knowles presented an illuminating breakdown of the MGH per diem cost of $44 per patient and the additional per diem charge of $10 to private patients to make up losses due to Free Service, contractual allowances (Blue Cross, welfare), and other reasons. These and other statistical data will be published soon in *The News.*

Dr. Austen to Direct Pulmonary Disease Unit

Dr. K. Frank Austen, who came to MGH as a medical intern in 1954, has been appointed Chief of the Pulmonary Disease Unit. Thus he fills a vacancy that had existed since Dr. John H. Knowles vacated that post in 1961 to become the chief administrative officer of the Hospital. At that time, as well as now, Dr. Knowles desired greatly "to increase interest in chest medicine as a clinical subspecialty of medicine."

Dr. Austen's new duties give him an important role in the new Harold W. Pierce Cardiopulmonary Research Laboratories. He will continue to serve as co-director of the Transplantation Immunology Center.

Alumni Reunion

A House Pupils Alumni Reunion will be held on Ether Day, Saturday, October 16, 1965. The occasion will have special significance since the Ether Dome has recently been designated as a National Historic Site by the National Park Service, Department of the Interior, and a government representative is to present an appropriate plaque as part of the day's ceremony.

Other plans for the reunion include scientific meetings, a report on "The MGH Today" by Dr. Knowles, the third John G. Treadwell Award to an outstanding MGH alumnus, a cocktail party and dance.

Complete details will be reported in a later issue of *The News,* and any suggestions will be welcomed by Dr. Henry H. Faxon (East Surgical Service, 1928), Chairman of the Committee on Arrangements.

Dr. Sumner Jackson, an MGH alumnus (East Surgical Service, 1916), is the subject of a biographical inquiry being undertaken by **Dr. Morris B. Sanders** (East Surgical Service, 1920) with the enthusiastic support of the News and Archives Unit. Dr. Jackson's professional career was centered at the American Hospital of Paris. He served his country in both world wars, and made the supreme sacrifice on May 3, 1945. Any information concerning Dr. Jackson would be gratefully received by Dr. Sanders or the Archives.

Vincent Show

Hello World, the Vincent Club's 73rd annual show for the benefit of the Vincent Memorial Hospital, will open Tuesday, March 30, at the New England Life Hall and play through April 3. There will be a Saturday afternoon matinee.

The world outside the sheltered ivy walls provides some new problems for three girls graduating from college, who are particularly concerned with the perennial feminine problem — marriage. Mrs. Edwin W. Hiam has written the play. Director is Charles H. Tate, who has directed the North Shore Music Theater and is Executive Director of the Belgian Village Pavilion at the New York World's Fair. Mrs. Edwin T. Green is show chairman and Mrs. Ezra F. Stevens, music chairman.

Cast members include Mrs. Victor H. Kazanjian, Ellen Hayes, Mrs. John A. P. McGlennon, Mrs. T. Corwin Fleming, and Mrs. David Palmer.

The traditional Vincent Drill will be performed during intermission.

Dr. Ebert Named Dean at Harvard

Dr. Robert H. Ebert, Chief of the MGH Medical Services and James Jackson Professor of Clinical Medicine, has been appointed Dean of the Faculty of Medicine of Harvard University. He succeeds Dr. George Packer Berry, who is retiring after 16 years in that post. The formal announcement was made on March 8 by President Nathan M. Pusey, and the appointment takes effect on July 1, 1965.

Dr. Ebert will head a faculty that includes more than 500 physicians and scientists, of whom 145 are professors and associate professors. This faculty includes the School of Dental Medicine as well as the Medical School. In addition, about 1,000 younger doctors and professional workers are associated with the faculty in teaching and research.

Two previous Jackson Professors have served as Deans of the Medical School: Dr. Calvin Ellis (1869-1883) and Dr. David L. Edsall (1924-1935).

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The NEWS of MGH

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Children's Ambulatory Care Unit Rebuilt

Play area offers diversion for children as they wait for treatment. To the left of the play area (but not shown on the pictures) is one of the Ambulatory Unit's three rooms having a one-way window, which allows observation of patients in a natural and relaxing atmosphere.

The redesigned and rebuilt Children's Ambulatory Care Unit in the Clinics Building, which has increased the treatment space for pediatric patients by 100%, was opened on December 2, 1964, the same day on which the Children's Service conducted a seminar on pediatric ambulatory care.

This unit is under the general direction of Dr. Nathan B. Talbot, Chief of the Children's Service; and on-the-scene direction is provided by Dr. John P. Connelly, Chief of the Children's Service Ambulatory Care Division.

The Child Behavior Health Care Unit, headed by Dr. Richard B. Kearsley, will share some of the space in the new facility and much of its special equipment, including closed circuit TV and tape recorder.

Dr. Connelly states that the new facility "became necessary because of the increasing demand for ambulatory care and the potential for doing many things on an ambulatory basis which are currently done in the hospital."

He states further: "The clinic is designed to serve as a channel through which all resources of the MGH may be brought to bear on infants and children in the most efficient, pleasant, and effective manner. It functions as a general diagnostic and therapeutic care unit six mornings a week. Afternoons are devoted to specialty problems in pediatrics, such as neurology, child behavioral health, metabolism and endocrinology, allergy, cardiology, pediatric urology, general surgery, etc. In addition, the clinic staff is available at other times, both day and night, for the care of unexpected illnesses in the Emergency Ward and Overnight Ward."

"While the clinic is prepared to furnish total patient care in the setting of the hospital, it is designed to render consultant services to physicians in accordance with their specific requests."

The new unit has 14 examining rooms, 3 rooms with one-way windows to permit observation of patients under natural conditions, a large play area, and a conference room, in addition to offices for staff members. The latter include 7 full-time pediatricians, 3 child behavior investigators, 2 social workers, 8 part-time doctors in various specialties, and 3 graduate nurses, aided by several student nurses.

Dr. Kearsley states: "I discovered that about 30% of the pediatric patients I saw in private practice had some sort of behavior problem, which as a pediatrician I felt poorly equipped to solve. The opportunity of combining this firsthand knowledge of the practicing pediatrician's needs with Dr. Talbot's long continued concern for the total well-being of children prompted my return to the MGH after several years of practice in a nearby community."

Dr. Nathan Talbot comments: "Dr. Kearsley's behavioral unit will be an integrated part of our new ambulatory service. It will be concerned with the interaction between physical, social, and psychological factors in providing children and their families with their total needs. Special procedures are being developed in collaboration with experts in many fields to help solve the problems involved. Careful investigation by highly trained scientists is basic to any success we may have.

"In problems of growth and development and disease peculiar to children, one has to consider not only the physical aspects but also the psychological. This will be Dr. Kearsley's main concern; and I feel certain that this unit is going to make an important contribution to better pediatric care.

Dr. John H. Knowles, General Director, points out the significance of the new unit: "The emphasis placed by Dr. Talbot and the Children's Service on the best in ambulatory care is a crucial development at this hospital. Not only will it hopefully prevent the development of disease in children, but also it will help to contain the rising cost of hospital care by enabling us to make diagnoses and treat pediatric patients on an ambulatory basis. The MGH, in general, is placing more emphasis on its ambulatory facilities, and the developments in the pediatric area are most welcome."

The new face of *The NEWS* has attracted comment. The nameplate on page 1 was designed by Russ MacCabe, a Boston artist. The headlines are generally in Ludlow Trueface Bodoni Bold (18 and 24 pt.) and Linotype Century Bold (12 pt.) — a harmonious combination. The text is in Linotype Baskerville (10 pt.), an open face of delicate beauty which influenced the design of Bodoni. The legends are in Linotype Vogue Bold (10 pt.), which contrasts pleasantly with Baskerville. *The NEWS of MGH* is printed by Wellesley Press, Inc., which also prints the *Harvard Medical Alumni Bulletin* and does the typography and preparation of the *New England Journal of Medicine*.

Two displays are being exhibited currently in the Brick Corridor: prints by Kay Reinhardt, a student in the MGH School of Medical Illustration, and the mineral collection of Mirla E. Hunt, Phillips House Staff Nurse.

Dr. Ebert . . .

Continued from Page 3

both of whom served on the MGH Staff. Dr. Edsall was a Chief of the MGH Medical Services until he became Dean.

Dr. Ebert is widely acclaimed as a leader in clinical medicine. His interest has been centered on infections of the lungs, notably tuberculosis. He has made significant contributions in the investigation of cellular and vascular responses to inflammation and hypersensitivity, and he has sought to modify these responses by chemotherapy and adrenal steroids.

The following correspondence between Dr. Ebert and Dr. John H. Knowles, General Director, MGH, occurred on March 8, 1965:

Dear John:

It is with mixed feelings that I write this letter to tell you that President Pusey has asked me to succeed George Packer Berry as Dean of the Harvard Medical School. While I feel greatly honored to be called upon to follow such a distinguished man as Dean Berry, it is with deep feelings of regret that I contemplate leaving the MGH family. I have been here a relatively short time and yet I feel that the MGH is my home, thanks to the cordial atmosphere created by you and your administration, the Board, the Staff, and all of the others who labor to maintain the great reputation of the MGH.

My appointment will not be effective until Dean Berry retires and I shall be very much on the scene here until that time. I also intend to continue to head the Medical Services until my successor is named, if you and the Board agree. I feel personally responsible to the Staff, and I wish to make the transition an easy one for all concerned.

I would not have accepted the position as Dean if I did not believe that I could continue to serve the MGH in the future. I have a deep commitment to the Hospital, and in this new role I will be providing a different kind of service but perhaps one which will contribute even more to the future of the MGH. It has been a great privilege working with you, and I look forward to many more years of fruitful collaboration.

Finally, I hope that I may continue to look upon the MGH as my home even though I shall be on a leave of absence.

With warm personal regards

Sincerely yours,
Robert H. Ebert, MD

Dear Bob:

Once again the MGH has been honored by having one of its distinguished members chosen for the Deanship of the Harvard Medical School — undoubtedly one of the most important positions in American medicine. I know I can speak for all the MGH when I say that you will carry with you to Longwood Avenue the respect, admiration and affection of the entire Hospital. This magnificent old-and-young partner of the HMS is proud of you and will stand behind you, come hell or high water.

In the short time you have been with us, you have become indelibly an MGH'er. With your help we have instituted the new areas of preventive medicine and biomathematics, planned for the new Surgical and Special Services Building and a major expansion of the research area, and begun experiments in extending the teaching function to *all* patients in the hospital. The problems and the potentials for advance in the ambulatory clinic area remain, and you and I have also discussed the desirability of weaving the threads of social history and socioeconomic issues through the four years of formal medical education.

Don't become a stranger to us, and remember that all of us are here to help in any way we can.

Sincerely yours,
John H. Knowles, MD

Recent Fringe Benefits

Three important fringe benefits have been made available by the MGH Trustees and Administration within the past year. One is free life insurance to employees, which, in the event of death would pay to the beneficiary from 50% to 100% of the insured's base salary depending on his length of service.

The second fringe benefit is the offer of a tax-sheltered annuity plan from National Life of Vermont. This is a savings and retirement plan with certain income tax privileges which are granted to employees and professional staff of tax-free organizations.

The third benefit is a new Blue Cross-Blue Shield plan in which the Hospital pays the employee's Blue Cross in full, and the room and board coverage is raised from $18 a day to full semiprivate coverage. Other benefits have been greatly expanded under the new Master Medical coverage to include $15,000 worth of extended benefits beyond the basic Blue Cross-Blue Shield coverage. Doctors are under another plan, the Physicians Group.

Laser . . .

Continued from Page 1

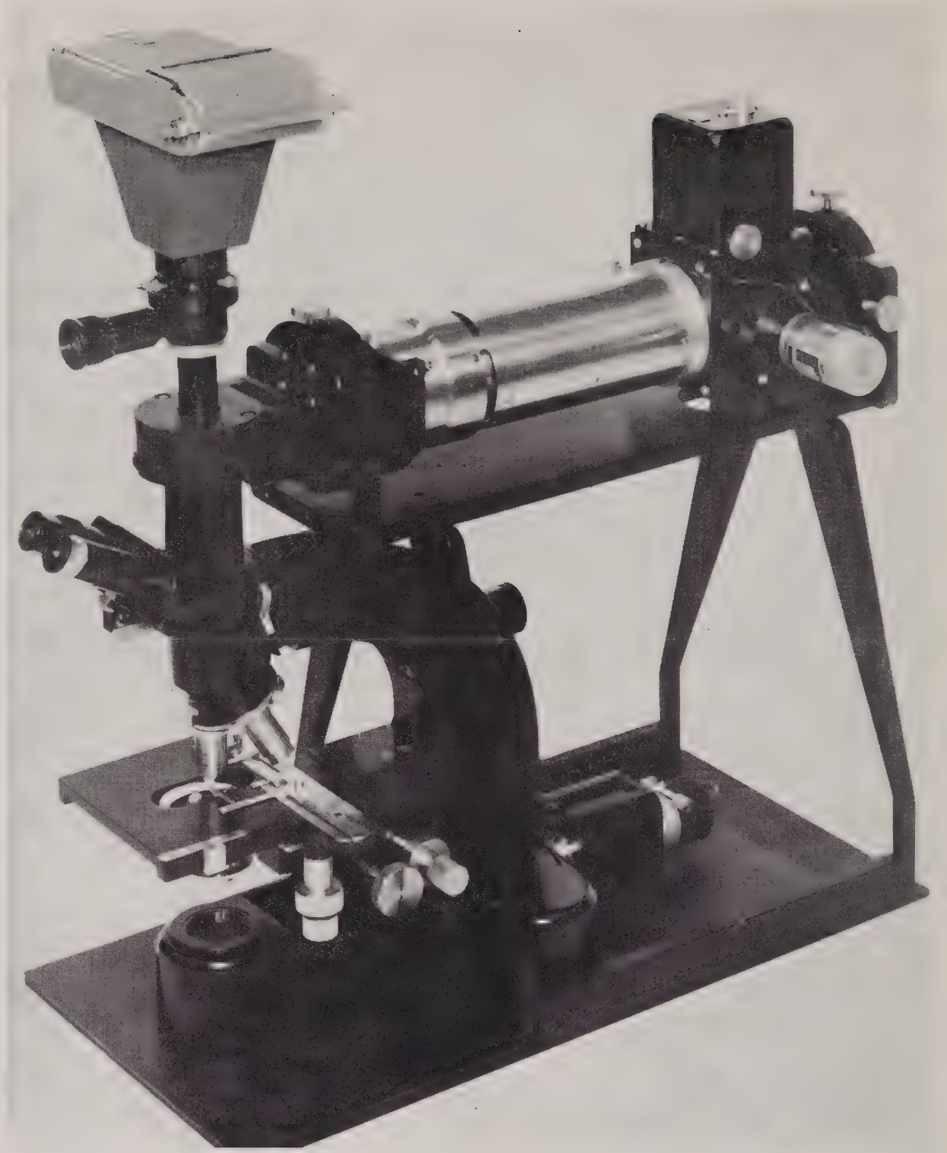
less than one micron in diameter, an area at least ten times smaller than most animal cells. Furthermore, the characteristics at the beam are such that the thermal effects are limited to the sphere of this diameter at the focal point.

The possibilities of using lasers for intracellular surgery were obvious early; therefore in 1962, two years after the first laser went into operation, we simply up-ended a laser on a converted orange crate over the photographic tube of a trinocular microscope, arranged its optical axis to be nearly concentric with that of the microscope, and were pleased to find that without difficulty we could focus a spot 2.5 microns in diameter on targets focused under the objective.

Flushed with easy success, we were able to make further modifications with the generous advice of MIT's provost, Dr. Charles H. Townes, who discovered the general principle of molecular amplification by stimulated emission of radiation (maser) in 1954. As we prepared to graduate to higher power laser sources in 1963, we visited the laboratory of Dr. Marcel Bessis in Paris and found that Dr. Bessis had already taken the next step. Indeed, the sophistication of his apparatus was such that a television screen connected to his microscope permitted observation of the actual moment of impact on the target with perfect safety to the eyes.

From research to commerce was a matter of only a few months. Today it is possible to buy a laser unit for a microscope for under $5000 and with it to make discrete, reproducible lesions a little over one micron wide in any target that will absorb the red laser light; transparent objects such as mitochondria can sometimes be made vulnerable by treating them with a vital dye.

Miss Elaine Kerns and I are using these instruments to make selective nucleolar lesions in cells in order to study the consequences on the structure and function of cytoplasmic ribosomes as part of our wider study of growth and differentiation, supported by the American Heart Association, the Shriners Burns Institute, and the Damon Runyon Fund. The difficulty with our experiments is that it is difficult to make untreated nucleoli absorb enough of the ruby radiation at 6943Å to be affected by the beam, but we hope that by twice doubling the frequency of light at 10,600Å from a neodymium glass laser so that we have a microbeam at 2650Å, we will be able to achieve absorption by the nucleic acids at much lower power levels.



Laser-microscope unit. High power levels are achieved by Q-switching to confine all of the laser output to a pulse of about 10^{-8} sec.

In another allied effort we are collaborating with Dr. Richard C. Lord and Mr. Claron Hoskins in the Spectroscopy Laboratory at MIT to identify the characteristic Raman spectra of certain purified nucleic acid and protein derivatives as a preliminary to using the laser to generate these spectra in small amounts of tissue. The possibility of thus identifying specific molecules within cells is exciting, although perhaps wildly visionary.

Clinical usefulness of a tool for destroying minuscule targets seems limited. For example, the cumbersomeness of a potentially self-coagulating scalpel probably overweighs any possible convenience; and as a destructive source directed through fiber-optic endoscopic systems the laser promises to be of particular value only in the ventriculoscope, an instrument used by some neurosurgeons for examining and treating the ventricular cavities. But for the vascular surgeon, applications are suggested by the recent report of a laser microbeam used to create an anastomosis between two small blood vessels glued side to side.

In actual practice, the major clinical trials have been in the treatment of detached retinas because of the appeal of a compact laser photocoagulator that would permit the accurate, painless placement of small retinal burns so fast that movements of the subject's eye would be of no account; yet until the present, the difficulty in controlling the beam has restricted its use to experimental situations in a few centers.

Much attention has also been directed to the destruction of tumors with the laser. Unfortunately many of the early enthusiastic reports smacked so highly of mystique that they provoked a lingering skepticism that is perhaps unwarranted. Enough reports from different groups have now appeared so that there can be no doubt that certain experimentally induced cancers treated under laboratory conditions can be caused to regress and that regression may take place beyond the visible limits of treatment. The almost total absence of controls for these experiments still leaves open the question of whether gross mechanical trauma, thermal or chemical burns, or some other form of electromagnetic radiation would not have produced the same result. Until the controls are done, or until specific new biologic effects of the electronic and molecular excitation caused by lasers can be demonstrated, reservations about a role for laser radiation in the therapy of cancer must persist.

Our laboratory has mounted no clinical trials, nor do we plan any. Nonetheless, we do have some instruments available, and if a patient especially suited for treatment with a laser becomes apparent, our attitude is always subject to revision.

RONALD A. MALT, MD

Hartford Foundation Awards Grant For Orthopedic Research

THE JOHN A. HARTFORD FOUNDATION of New York City recently awarded a 3-year grant of $243,291 to the MGH Orthopedic Research Laboratories for studies on the structure, organization and composition of dental enamel.

Dr. Melvin J. Glimcher, Director of the Laboratories, and Associate Professor of Orthopedic Surgery at HMS, will supervise the studies. Members of Dr. Glimcher's staff who will work on this project include Dr. Laurence C. Bonar, crystallographer; Dr. Elton P. Katz, physical chemist; Dr. Gerald L. Mechanic, biochemist; Dr. Dorothy F. Travis, electron microscopist; and Dr. Philip T. Levine, dentist and oral biologist.

The studies will be carried out with the cooperation of the Harvard School of Dental Medicine and the Forsyth Dental Center.

The Hartford Foundation had previously granted $690,000 to the MGH for research studies in this field by Dr. Glimcher and his staff. They now plan to examine tooth enamel in much greater detail in all stages of development. They are developing special methods of obtaining extremely thin

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Joseph S. Barr, MD
(1901 - 1964)

Joseph Seaton Barr came to the Harvard Medical School from the College of Wooster (Ohio) in 1922. From Harvard he graduated *magna cum laude* in 1926 and then served a general surgical internship at the Peter Bent Brigham Hospital under Professor Harvey Cushing, from whom so many trainees gained inspiration in that era.

His experience in orthopedic surgery began in 1928 at the Children's Hospital in Boston and continued at the MGH, from which he graduated in 1929. He then became associated with Dr. Frank R. Ober in the practice of orthopedic surgery, and was appointed to the orthopedic staff of the MGH and the faculty of HMS.

He contributed more than 80 articles to medical literature, dealing with subjects of tuberculosis, poliomyelitis, bone growth, and lower back pain. His classical paper on the "intervertebral disk," written with W. Jason Mixter in 1934, was without doubt his greatest contribution. Although Goldthwait in 1911 had called attention to the disk syndrome and Dandy in 1929 had recorded excellent descriptions of two cases, it remained for Barr and Mixter to emphasize the frequency of the condition as a cause of low back pain with sciatica.

This article led to a revolutionary change in our thinking regarding the origin of low back pain. Whereas before it had been ascribed to "arthritis" of the lumbosacral junction or "sacro-iliac strain," it can be said without contradiction that Barr and Mixter established conclusively that lower back pain with sciatica is in a large majority of cases due to injury of the intervertebral disk. As a result, an enormous number of patients have been relieved of this disabling condition.

His second most important accomplishment was the establishment of the Orthopedic Research Laboratories at the MGH. This had been a dream of his for years, and it became a reality in 1960.

He served with distinction in the U.S. Navy during World War II and retired as a rear admiral in 1962.

In 1947 he was appointed John B. and Buckminster Brown Professor of Orthopaedic Surgery at Harvard Medical School and Chief of the Orthopedic Service at MGH. He established a good balance between the practice of orthopedic surgery and research.

Dr. Barr had the ability to put his thoughts on paper. In his Presidential Address before the American Academy of Orthopaedic Surgeons in 1952 he said:

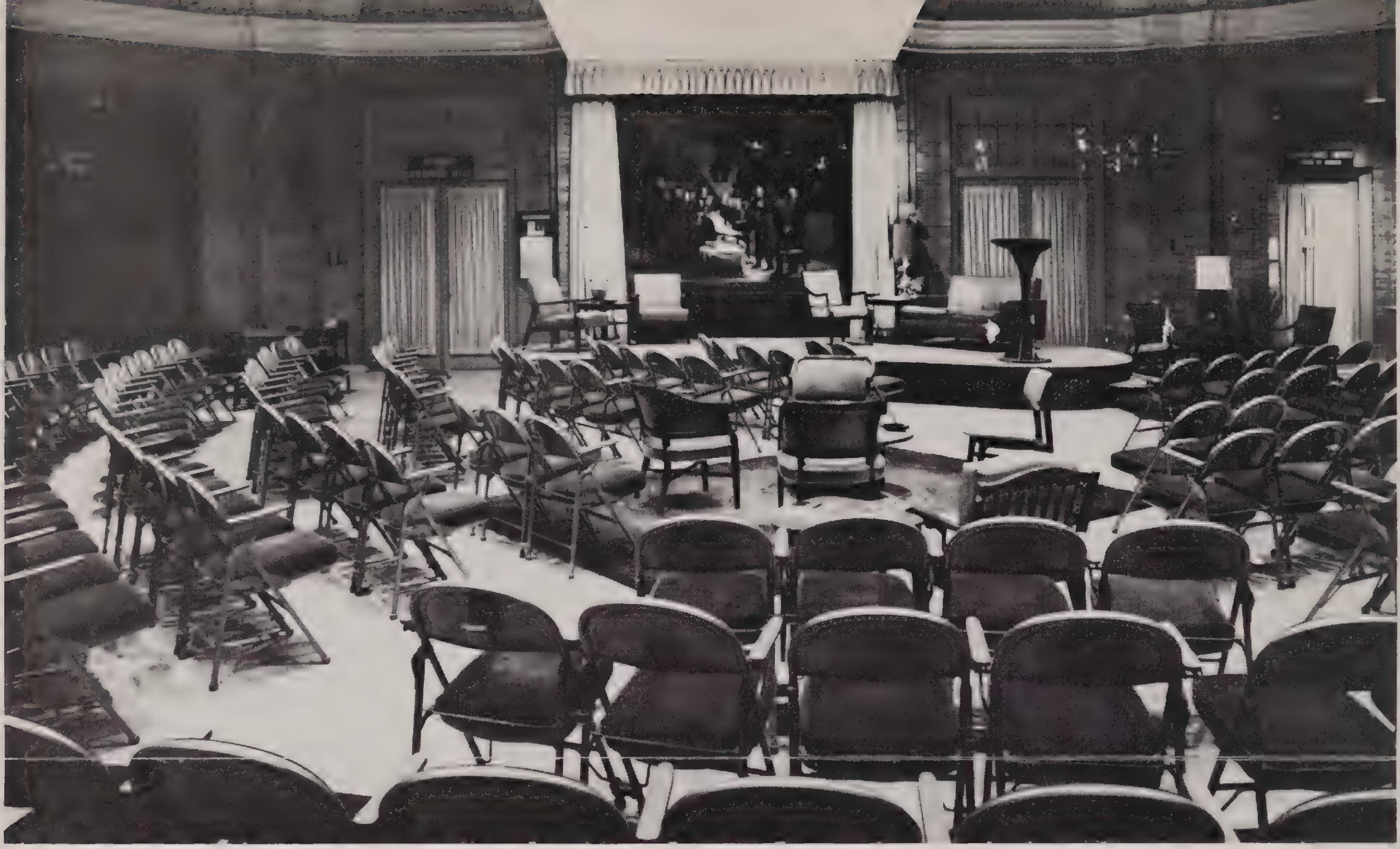
"Life is the great experiment — never repeated under identical conditions . . . We scarcely need to be reminded that every surgical operation *is* an experiment in which many variable factors are present, most of them not under the control of the surgeon. Because of these uncontrolled variables, the results of operative treatment are predictable only in a statistical fashion by *post hoc* analysis of results obtained in a significant number of similar cases. We recognize that the outcome in an individual case is not accurately predictable and that chance plays a role in determining the result."

He was regarded with friendly respect by a host of orthopedic surgeons in this country and abroad, particularly in England, where he was an honorary member of the British Orthopaedic Association. He was a member of the Advisory Board of Orthopedic Surgeons, Shriners Hospitals for Crippled Children, the Medical Advisory Board of the Alfred I. duPont Institute, and Orthopedic Consultant to the Division of Handicapped Children's Services, State of Vermont. He belonged to all of the important orthopedic societies in the United States and held membership in the New England and Boston Surgical Societies and the American Academy of Arts and Sciences. His undergraduate college awarded him an honorary degree of Doctor of Science in 1952.

Progressive physical disability from severe emphysema with resultant cardiac embarrassment during the past 3 years took its toll, but with great fortitude he carried on his administrative and professional duties. Finally, he announced his retirement to the Staff at Grand Rounds on October 28, 1964, and just 6 weeks later, on December 6, he succumbed at the age of 63, much too young for a man of his abilities and accomplishments.

He was one of the outstanding teachers of orthopedic surgery in his generation, and the clinic which he directed for 17 years was regarded as one of the most desirable for training in this field.

EDWIN F. CAVE, MD
Orthopedic Service



The cold, formal, rectangular arrangement formerly seen in the auditorium of the Moseley Building has given way to warmth, informality, and flowing rhythm, so well captured in this available-light photograph by Frank Ward, a supervisor on the MGH Building Services. Note the curving lines of the new stage and the lectern, which was designed by Dr. Ellsworth Neumann. The voices of a panel group, sitting in the four chairs on the center rug, can be amplified by a hidden microphone. This new arrangement in the auditorium underwent a successful trial during the recent Lowell Lectures.

Treadwell Library

The first full-time librarian of the Treadwell Library was Mrs. Grace W. Myers, who was appointed in 1897 when the library was located in the Bulfinch Building. She recorded some of her early library experiences in her autobiography (1949):

"I promptly attacked the problem of arranging and classifying the books. With the assistance of Dewey's Classification I proceeded to so mix up the entire Library that no one but myself knew where anything was. My rearrangement was scientific to the nth degree, even though at first it proved puzzling to regular readers. Some of them would approach me and say, 'Such and such a book used to be here, but now I can't find anything.' Fortunately I could produce the volumes, and in time the readers began to acknowledge that a classified arrangement was an improvement."

"During my earliest years in the Library it was customary to hold evening meetings of the Staff in the main room, and these were followed by a supper served in the same place. I dreaded these meetings because I had to clear the big ten-foot table in the center of the room of all current periodicals, for thereon was the 'feast' spread. When I came in the morning all the things had to be put back, and order restored. This arrangement continued until one morning, as I made my rounds after one of these 'suppers,' I found a whole row of books, bound in half-morocco, spattered with salad dressing. I had already suggested holding these affairs in some other place, but without making any impression. But this time my ire was aroused and, without waiting for it to cool down, I went to Dr. Howard's office (the Director) and let off steam. It was effective. After that no more 'suppers' were held in the Library."

(The massive walnut table mentioned above has just been repaired, refinished, and returned to the same room, which is now the Medical Staff Room.)

"Before the end of my first year I had won the approval of the Medical Staff, who were the only ones allowed access to the shelves, and in the *morning* were the only ones who might enter the room. In the afternoon, when all of these gentlemen had taken their departure, House Pupils (Interns) might come in and read. But gradually more freedom was allowed, and years later the Library was never closed, but was open at all times to all scientific departments of the Hospital, including nurses, and to students from the Medical School, and others."

Hartford Foundation . . .

Continued from Page 7

sections of intact undecalcified teeth. These sections will then be studied by the usual methods of light microscopy, microradiography, X-ray diffraction, electron microscopy, and electron diffraction.

According to Dr. John H. Knowles, General Director, the Orthopedic Research Laboratories, although only four years old, "have already made substantial contributions to the understanding of the structure of bone and tooth enamel and their relationship to the mechanism of calcification." Evidence of this was Dr. Glimcher's 1964 Biological Mineralization Award of the International Association for Dental Research — the first time that any work in this field was considered worthy of the honor since the award was established seven years ago.

Dr. John W. Hein, Director of the Forsyth Dental Center, stated: "Dr. Glimcher and his staff have already made remarkable progress in characterizing the organic components of enamel. It is reasonable to expect that this may be of vital importance in determining the degree of natural resistance of teeth to dental caries."

The NEWS of MGH

Vol. 24, No. 3 Boston, Massachusetts April 1965

People to People

MGH Doctors Serve on S.S. HOPE

President Eisenhower in 1956 drafted the "People-to-People Program," a plan which he hoped would meet a need in United States foreign policy for more personal contacts between Americans and people of other countries, a need which could not be met by conventional diplomatic measures.

Under the direction of Dr. William B. Walsh, a Washington, D.C. internist, the People-to-People Health Foundation was created to implement this program. The hospital ship *Consolation* was lent to the Foundation by the Navy, and in 1960 Project HOPE was launched: the *S.S. HOPE* was on its way to Southeast Asia, to serve as a temporary teaching hospital for physicians in Indonesia and South Vietnam.

Since that time, the *HOPE* has traveled to Peru and Ecuador, and is presently in Guinea. Three present MGH physicians have served on the *HOPE:* Dr. Henry P. Pendergrass, Department of Radiology, in Peru from May to July, 1962; Dr. J. Gordon Scannell, Visiting Surgeon, in Guinea in December and January, 1964-65; Dr. Walter S. Kerr, Jr., Visiting Urologist, in Guinea during December, 1964. What the *S.S. HOPE* is achieving in terms of the goals of the HOPE organization (**H**ealth **O**pportunity for **P**eople **E**verywhere) can be appraised by these three doctors, who have had the direct experience of working on the *HOPE* and subsequently the time to make an objective scrutiny of that experience.

As one of its goals, "HOPE brings the skills and techniques developed by American medical, dental and paramedical professions to the people of other nations in their own environments, adapted specifically to their needs and their way of life." To this statement of policy should be added the original aim of President Eisenhower's People-to-People Program, that it be an extension of the United States foreign policy.

Although in Peru there was only one permanent staff physician on the *S.S. HOPE,* it now usually has a permanent staff of 5 physicians, 36 nurses and 25 paramedical personnel at a small salary, and 20-30 volunteer medical and surgical specialists who rotate on two-month service periods without pay. All materiel for the ship is obtained through donations: the drugs and expensive medical and surgical equipment from U.S. hospital supply and pharmaceutical industry; the medical textbooks from individuals, medical libraries and publishing companies. An excellent medical library is maintained aboard ship, and the many surplus books and journals are distributed to hospitals and medical schools in the visited countries.

The effectiveness of the "people-to-people" philosophy underscoring Project HOPE evokes strong enthusiasm from all three MGH physicians. Dr. Scannell comments that, "The people-to-people technique is very successful and meaningful. In a country the size of Guinea, the actions of each individual are important, and if the individual happens to be American and from the *HOPE,* his actions are ex-

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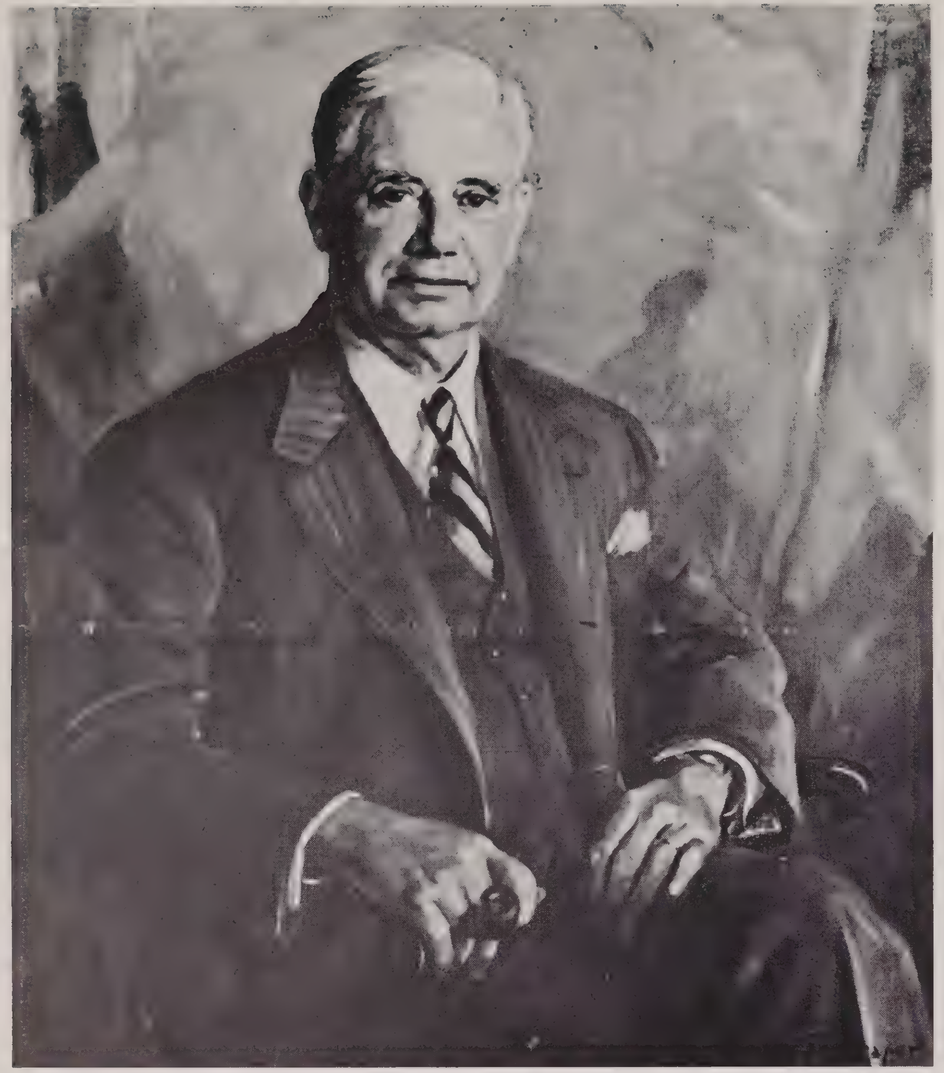
Salavery Harbor, 10 miles from Trujillo Medical School, Peru

Tom Dailey. People to People Health Foundation, Inc.



Abbot Stevens (1890-1958)

Future Diagnostic Center Is Named

The diagnostic center to be established in the new Surgical and Special Services Building has been named in honor of a great benefactor, ABBOT STEVENS of North Andover, who was a member of the Corporation of the Massachusetts General Hospital from 1950 until his death in 1958. A gift of $500,000 for this center was recently received from the Abbot and Dorothy Stevens Foundation.

This center will provide elaborate diagnostic facilities for radiology, neuroradiology, thyroid scanning, electroencephalography, electrocardiology, and other clinical services. It will be located on the second floor, in contiguity with the existing radiological facilities on White 2 and Baker 2.

Abbot Stevens, a Harvard College graduate of 1911, joined the textile firm which had been founded by his great-grandfather, Capt. Nathaniel Stevens. He became president of the M. T. Stevens Company, and vice-president and a director of the J. P. Stevens Company.

He was chairman of a development campaign at the Lawrence General Hospital, and a trustee and treasurer of Phillips Academy. An oil painting by William F. Draper, which is reproduced above, hangs at the Academy.

Concerning the Abbot Stevens Diagnostic Center, Dr. John H. Knowles, General Director, states:

"This new center is vital to our primary function of caring for the sick. It centralizes a number of key facilities, makes it easier for the patient to get done what needs to be done, and is essential to the better diagnosis of the patient, including the outpatient."

Staff Members: One function of *The NEWS* is to feed data into the Archives for the use of historians. So please report awards, citations, and other evidence of personal achievement to the News and Archives Unit on Moseley 1 (tel. 888).

Muriel M. Miller

(1901 - 1965)

Mrs. Muriel McLatchie Miller, founder of what today is known as the Visual Education Services Department and the School of Medical Illustration at MGH, died from a coronary attack on March 19 in Calgary, Canada. She had been quite active in the second year of her retirement, and had just completed an exhibition of works of Canadian medical illustrators at the gallery of the Calgary Allied Arts Council.

She was born in Toronto and educated in Calgary. She studied medical art at Johns Hopkins University under Max Brödel, who had founded there in 1911 the first school of medical art in the world. In 1930 she came to MGH as illustrator of Dr. Joe V. Meigs's first book on gynecology, and she pursued advanced studies at the Butera School of Art.

Within two years she had demonstrated so well the value of visual communication to medicine that Dr. Edward D. Churchill, Chief of the West Surgical Service, sponsored her appointment as the first full-time medical artist at MGH. Her first studio was located in a corridor on Bulfinch 4. She also established a good working relation with Wilbour C. Lown, who in 1930 had been appointed first full-time photographer at MGH. When the Surgical Services moved into the new White Building in 1939, Dr. Churchill provided quarters for her expanding department.

In 1941 Dr. Churchill helped her establish a school of medical illustration at MGH — the first in New England. On her first faculty were Betty Foss (later Mrs. Strachan) and Mr. Lown. Drs. Robert M. Green and George Erikson of the HMS Anatomy Department were the first physicians to give anatomical instruction as part-time members of her faculty. This school was located first in a Domestic Building corridor and later in the basement of the Moseley Building.

She was a cofounder and first secretary of the Association of Medical Illustrators (1945). In this endeavor she worked closely with Thomas Jones, professor of medical illustration at the University of Illinois Medical School. She was president of the AMI in 1954.

In three decades of productive work she illustrated 18 textbooks and countless lectures, journal articles, and exhibits. Through her 58 graduates she influenced the development of medical art as a vital paramedical profession throughout the country. Although her school offered no degree, her alumni were always able to compete successfully against those with medical art degrees from other schools.

One year before her retirement the medical art production unit and her school were finally brought together in a single spacious location in the old Pathology Building. When she retired in 1960, a special committee headed by Dr. Jack R. Dreyfuss recommended that the production unit, the school, and the photography laboratory be integrated administratively as the Visual Education Services Department, with Thomas A. Stebbins as overall director.

Today Mr. Stebbins' staff includes three of her alumni: Mrs. Edith Tagrin as head of the Medical Art Unit, Sidney Rosenthal, instructor, and Paul Andriesse, with Stanley Bennett as head of the Medical Photography Unit.

Relations between Mrs. Miller and her students were unusually close. She devoted much individual attention to each student, and helped each graduate establish a career. She wrote many personal letters and a bulletin to keep her alumni informed about MGH affairs. She continued such activity even in retirement.

The Paul Revere bowl presented to her at her farewell party bears the following inscription.

With admiration for her great contribution to the field of medical art

With thanks for her deep and everlasting influence as a teacher

And with love from the graduates, colleagues and friends of the School of Medical Illustration.

The NEWS of MGH

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Mrs. Miller and Student

Two staff members contributed the following statements of appreciation concerning Mrs. Miller:

"Mrs. Miller and I worked together over a great number of years. She could blend the ideas of the surgeon into an illustration on the easel which would reproduce well in the book.

When it was first decided that I was going to write a book on constructive hip surgery, I asked her to illustrate the book for me. I told her that I was prepared to be critical to the point of being maybe ridiculous about small details. If she felt she could tolerate this kind of criticism, which was not directed at her illustrations but at my inability to get across what I wanted illustrated, then I thought we would do it.

For a period of approximately 8 months she worked in my office. She spent many hours in the operating room drawing sketches, illustrating the points I was trying to make. We also spent quite a few hours in the Pathology Department dissecting the hip and illustrating the anatomy. Whatever success the book may have had is in a major part due to the excellence of her illustrations. In view of the many illustrations and repeated drawings that were necessary she willingly accepted the assistance of my wife in some of the drawings and also wholeheartedly accepted my criticisms in the spirit they were given.

Mrs. Miller's impression on the MGH and on medical illustration is a permanent and enviable one."

Otto E. Aufranc, MD

"I am particularly grateful for her efforts with our *Fractures and Other Injuries* (1958) in which she did illustrations. In illustrating this book she had to contend with 39 individual authors and their temperaments. This was no easy task but she managed it well. The school which she established had many growing pains, but is now on a firm foundation and is an extremely important part of the Hospital, particularly for those of us who appreciate the value of good illustrations in our scientific articles. All of us owe a great debt to Mrs. Miller and we shall miss her tremendously."

Edwin F. Cave, MD

Becky Young Exhibits

On display in April in the Brick Corridor was a collection of color prints by Miss Becky Young of the Medical Photography Unit. The prints, which she processed from Ektacolor negatives, illustrated a penetrating search for artistic forms in various types of "junk" — compressed scrap metal, discarded store mannequins, old houses, paint peeling from a metal tank.

Miss Young is a 1961 graduate of the Rhode Island School of Design and was an instructor in photography there for three years before coming to MGH. Her photographic work has been on exhibit at Harvard University and at the Rhode Island Art Festival. Another group of her photographs, pictures of children, will be shown in the Brick Corridor in May.

Tom Dailey. People to People Health Foundation, Inc.

Radiology room on S.S. HOPE. Two Trujillo students on left; Dr. Alex Edwards of New York; Dr. Pendergrass with pointer.

From slide taken by Dr. Kerr

Guinean medics on S.S. HOPE

Operating room on S.S. HOPE, with Dr. Scannell (left) and Dr. Roger Accar, Surgeon in Chief of Balley Hospital and also Minister of Transport of Guinea.

Four MGH surgical alumni have served on the *S.S. HOPE:* Drs. Jack E. Tetirick (1956), Paul E. Spangler (1925), John W. Ratcliffe (1946) and Walter M. Haynes, Jr. (1956). The first three opened the surgical service on the *HOPE* when it arrived in Jakarta, Java on October 19, 1960.

S.S. Hope . . .

Continued from Page 1

tremely significant, since they imprint a picture of the United States in the mind of the Guinean. The people of Guinea like Americans in general, and they appreciate what is being done for them. But they do *not* want to be patronized, nor do they want to be expected to be eternally grateful. Any person who goes to Guinea must keep in mind more than anything else they want to be an independent nation."

Not only do *HOPE* doctors administer medical treatment, but they play an important role with nonpatients as well. These include persons encountered casually in the street as well as local doctors, nurses and technicians who may be receiving instruction on the ship. It is here on the personal level, free of official trappings, that the powers of simple consideration and mutual understanding can have their most valuable meaning. The rotating doctors also found that they became builders of morale among some of the hard-working permanent staff.

The emphasis on personal relationships with those in other countries is only one of the aspects of a "missionary" health aid program which extend beyond the strictly medical area. Dr. Pendergrass states, "As we are slowly learning in the United States, the problems of medical care, both domestic and overseas, have ramifications that extend to socio-economic and political areas."

This is upheld by the observation that barriers to certain types of medical treatment exist in many of the visited countries. Some of these barriers are traditions and customs deeply etched in the societal pattern, which would have to be modified (through education) before medical science could make significant progress. Given this handicap, there is still medical value in the *HOPE's* mission according to Dr. Kerr: "When the time comes for them to make bigger steps forward in medicine, at least they will have seen what good care is."

One general criticism of the HOPE program in its early stages was directed at the short length of time spent in each port. The Southeast Asian trip, the first, allowed just three weeks at each stop. The ship now spends nine months at each port. Even with the longer time period, others have suggested that it may not be wise to introduce modern medicine and then withdraw it. They contend that public health and preventive medicine should receive the emphasis initially, since much disease starts with poor nutrition and unsanitary living conditions.

In places like Peru the disadvantages of short-term treatment might be offset by the number of Peruvian doctors, medical students, nurses, and other hospital workers who received training on the ship and could then put their training to use. Dr. Pendergrass says that, "This broad spectrum of instruction to multiple individuals at all levels would be difficult to accomplish without the hospital ship."

Each country visited presents distinct problems, however. In Guinea the question of training doctors was not so pertinent as in Peru. "There were not a great number of doctors to train," Dr. Scannell commented. "The biggest job of education was done with paramedical personnel. There is value in the education of the local doctors who can take advantage of it. As for medical treatment, the doctors are aware that they can only make a dent in the vast deficiencies in illness and disease."

The doctors are also aware that history may record that the favorable foreign policy effects of Project HOPE far outshine the medical and educational aspects alone.

After four years of activity, the *S.S. HOPE* continues to enjoy the approval of both participants and observers, though both with reservations. Transcending the reservations, nevertheless, is the visibly positive response demonstrated by people to whom the *HOPE* has brought relief. In some cases the ship has sailed into port through a chill wind of antagonism and suspicion; and nine months later crowds of people have watched it depart, their faces mirroring both warmth and sadness. It appears that Project HOPE has achieved what President Eisenhower originally had in mind when he conceived the People-to-People Program — to create an effective reinforcement on the personal level, to United States Foreign policy.

A *Saturday Review* editorial in March 1964, hailed the fourth anniversary of the *S.S. HOPE* and made an appeal for its support, calling it ". . . perhaps the most exciting voluntary medical assistance program in the history of mankind." Dramatic phrasing, but the aura surrounding Project HOPE *is* dramatic and the word "exciting" does characterize the feeling generated by Drs. Pendergrass, Scannell and Kerr as they discuss their association with the *HOPE*. They describe it as a memorable and stimulating experience, and their strongest misgiving is a frustration not to have accomplished more.

Gail Tuk

Among the MGH nurse employees who have served on the S.S. HOPE are Janet M. DiBona, Ruth Currie, Ethel Vandebunte, and Dorothy Webster.

From slide owned by Dr. Kerr

Dr. Kerr (left) and friends en route to Dalaba

A Festive Weekend in Guinea

Dr. Walter Kerr and some other members of the HOPE staff took a weekend bus trip through the Guinean countryside. Along the way they were met by one celebration after another. Below, Dr. Kerr describes a picnic in the district of Mamow:

There were approximately 600 or 700 people who lined each side of the road down to a pretty waterfall. They were dressed in their best and stood clapping their hands in time with the music.

When we waved to them they all smiled, their eyes lighting up. We could not imagine what in the world we had ever done to deserve such a greeting like this. Interspersed with the crowds were several groups of dancers and musicians, playing the wonderful Guinean music. We wandered down through the people into a forest and then to the waterfall. Paths had been freshly cut.

Benches had been prepared of new bamboo for us. Trees had been cut down so that the view of the falls was superb, and they had even made a walk with a vine railing, running to the pool at the bottom of the falls.

We thought this was the highlight of the visit and were greatly surprised as we came to the top of the hills. We passed into a glade where there were more bands, more people and an unbelievable amount of food. In a stream were bottles of local soda, of orange, banana and other flavors. There was German beer, Chinese wine, Scotch whisky, French champagne and many kinds of Guinean hors d'oeuvres and meats and rice and mango type of entree. For dessert there were Guinean bananas, tangerines and oranges.

Throughout the festive lunchtime, which approached the Harvard 25th Reunion in its completeness, was continuous rhythmic music.

After lunch, they drove to the town of Dalaba, where another festival had been planned in their honor:

In front of the hotel were two separate orchestras with dancers, each dressed in different costumes. Before long, several large Army type trucks drove up, and lo and behold, six more orchestras and groups of dancers appeared. Almost all the dancers took off their sandals and danced on the roadway, which consisted of hard-packed gravel with small, hard stones on the top. They soon had danced the stones away and were dancing on the hard pack. Their feet moved at an incredible rate. With so many different groups, all trying to outdo each other at the same time, it was almost an impossibility to appreciate them, let alone pay enough attention to each. Finally, amidst wild acclaim from the spectators, they climbed on their trucks and disappeared down the road.

The Guinean Ballet has been famous the world over for thirty years, and many of the people in the Ballet got their start in this town of Dalaba.

MGH Radiologist in Nigeria

Dr. Stanley P. Bohrer, formerly a resident physician in radiology (1963) at MGH, is presently a visiting lecturer in radiology at Ibadan University College Hospital in Nigeria. In a recent letter to The NEWS he points out how MGH-trained doctors can help promote the development of medicine in the newly developing nations.

Nigeria is in that group of nations lying south of the Sahara and above Central Africa, appropriately called West Africa. It is the most populous country in Africa with 55 million people (15% of the population of the continent) and Ibadan is the largest native African town, with one million people.

The University College Hospital is a modern federal government hospital built in 1956 as the teaching hospital for Ibadan University Medical School. The Hospital is similar in many ways to the MGH: active in teaching medical students, nurses and doctors; active in research, and an important center for both community and referred patients.

Medical practice in Ibadan requires a new approach adapted to new experiences. It is refreshing, exciting, and at times disheartening. The newcomer is faced with an entirely new gamut of diseases to consider in his daily differential diagnoses.

By necessity, the approach to the patient must also be altered. Not only is there a certain language barrier, for which nurses, porters, radiographers and other Nigerian members of the hospital staff are invaluable as interpreters, but patients enter the hospital from an entirely different background of social customs, beliefs, and fears, with varying attitudes towards hospitals, doctors and the modern practice of medicine.

Nigeria became independent in 1960 and like many new African nations is beginning the shift from an ancient village system with over 250 separate tribes and as many different languages to urbanization and a unified nation. In medicine, just as in industry, agriculture and politics, all stages of this change are still apparent. Highly technical research and medical procedures are being carried out at the medical center — tissue culture, albumin and magnesium metabolism studies, cardiac catheterization and angiocardiography, etc. — while at the same time malaria, measles, polio, Schistosomiasis, hookworm and malnutrition are still daily offenders and killers. Both the physicians and the patients are slowly progressing through this difficult transition.

Studies such as the Akufo Project, which for four years recorded and analyzed every aspect of health and disease, birth and death, biochemistry, bacteriology and parisitology in a small, isolated Yoruba village, will help to establish basic data for future medical workers. It is also evident that changes are occurring among the people; new values are being adopted as new ideas are being considered.

A young Yoruba mother appeared at the Sabin oral polio vaccine clinic with a very tiny infant strapped to her back in the usual manner. The infant was so tiny that the question of some sickness was posed with the help of interpreters. The mother revealed that the child was born only four hours earlier and she had walked ten miles to the clinic after the delivery so that her baby would be protected.

Stanley P. Bohrer, MD

Through education and public relations, as well as the daily reminders of the crippling effects of polio seen on every Ibadan street, 40,000 infants were brought for their polio vaccine during a recent three-day campaign. Smallpox vaccination is becoming accepted as protection against that disease in addition to the yearly rituals dedicated to Sopone, the spirit and god of smallpox.

Discussions with some of my friends and contemporaries here in Nigeria make it evident that in the field of education and other areas where they are working at close personal levels with the people of Nigeria, they, too, are experiencing the same small successes which will eventually summate to make overall success a reality. It is a long, slow process and I am glad to have had the opportunity to play some small part in it.

My impressions of Nigeria would not be complete without some mention of the Peace Corps and the tremendous job these vital young people are doing for Nigeria and for America. Their presence is felt from the largest towns to the smallest villages and everywhere the same appreciation and admiration is evident.

As my remaining time in this country draws to a close, I feel a certain sadness about leaving my new friends, the many challenges, the excitement, the stimulating medical experience and, indeed, everything in Nigeria. I do occasionally miss Boston, a constant supply of water and electricity, twinburgers and a few other things, but I still hope to be able to return to Africa and its medical developments for reasons I've tried to relate in this brief letter.

I am looking forward to seeing all of my friends at the MGH soon and perhaps discussing some of the above impressions a little fuller.

Treadwell Library

How did the Treadwell Library function before the advent of the trained librarian? One answer is provided in the 1888 annual report of the Treadwell "Librarian," who was Dr. Maurice H. Richardson, Visiting Surgeon:

"The Library is in a very unsatisfactory condition . . . The books are now in great confusion and many cannot be found . . . The books of the Library as well as the records of the whole scientific work of the Hospital are at the mercy of anyone who may choose to walk in."

Fifteen years earlier Dr. Norton Folsom, newly appointed director of MGH, had tried another plan, described in the Annual Report for 1874:

"By the liberality of the surgeons and physicians, for the last two years, the services of a (private) librarian have been provided, and, since this plan was adopted, no book has been lost, and the preservation of perfect files of the large number of journals subscribed for, has been in a great measure secured."

This private librarian was paid by the doctors, not by the Hospital. Subsequent annual reports make no further mention of any library employee until 1897, when the Trustees appointed Mrs. Grace W. Myers as a salaried, full-time "assistant librarian." At that time Dr. Arthur T. Cabot, Visiting Surgeon, was the official librarian.

Before the end of her first year Mrs. Myers had not only put the library in good order but had already started to develop an organized system of medical records.

Correspondence

Side Pockets

To The NEWS of MGH: Your picture of Dr. Nathaniel Faxon (*The NEWS,* May 1964, showing Dr. Faxon in 1906 with his hands in his pockets) reminds me of the amusing story relating to Dr. Frederic Washburn (former MGH director) as to the absence of side pockets in the white trousers furnished to interns (house pupils) about 1906 — a story once told by Ted Eastman at an Aesculapian Banquet.

In the era 1930-1941 we at the Duke University Medical Center offered long white coats to visiting clinicians from the MGH when they came on visit. If they wore the white coat for their appearance, they invariably put both hands in their hip pockets at some time — never in the side pockets. This became a characteristic gesture for Dr. William Castle, and Dr. George Minot did it frequently. Our surgical friends from the MGH were not immune. Larry Ellis, Linn Cooper and John Eager Howard got the habit, as did Fuller Albright and George Reynolds. On two occasions (which I could not document) Paul D. White — wearing a white coat — put his hands in hip pockets for emphasis. I never saw Dr. Howard Means do any of this, but I may not have been watching him for this. These anecdotes may not deserve publication but should not be lost.

Elbert L. Persons, MD
Durham, N.C.

Dr. Faxon, when asked to comment on the above letter, wrote in:

Dr. Persons' letter is most interesting . . . When Dr. Washburn returned to the MGH following his army service in the Philippines, he was imbued with the military spirit and he imposed many of its details on this hospital. Standing with hands in pockets he considered unmilitary, and the only way he saw of breaking this habit on the part of house pupils was to have their white trousers made without side pockets; and so this was done (about 1906), much to the disgust of the house pupils — but they could do nothing about it. Until one day, quite a time after this edict had been executed, somebody caught the Colonel, as he was often called, with *his* hands in his trousers pockets, and rather exultingly called his attention to the fact. The Colonel's military crusade had weakened considerably by this time and he had mellowed a bit; and as he possessed a keen sense of humor, he allowed that the joke was on him, and then and there rescinded the order, so that the next supply of trousers for house pupils did have side pockets.

Nathaniel W. Faxon, MD
West Falmouth, Mass.

Copies of the following letter were mailed by Dr. George S. Richardson of MGH to several surgeons in Montgomery, Alabama while the 54-mile, 5-day civil rights march from Selma to the Capitol was in progress. Dr. Richardson was one of a Boston group that flew to Montgomery on an airliner chartered by the Massachusetts Council of Churches and participated in the final lap of the march on March 25, 1965. He has since received several replies to this letter.

Dear Colleague: I am writing to you because we both are Board-qualified surgeons, because you live in Montgomery, and because I have decided to go there to participate in the civil rights demonstration on Thursday, March 25.

My reason in going to Montgomery is the same as that of all other participants in the civil rights movement. I am responding to the call of the Southern Christian Leadership Conference just as I hope I might have responded to an invitation to be among the signers of the Declaration of Independence. By this symbolic signature I am declaring my own belief in the nonviolent movement for civil rights not just in Alabama or in the South, but in Boston as well. In doing this, I am responding as an individual, not as a representative of the many groups and activities to which I am privileged to belong.

I share the fears of all responsible citizens that violence may result from the present political struggle and I am anxious to help prevent it. I believe that sympathy and responsiveness to the justified and peaceable demands of Negroes now is the only course which can prevent unjustified demands and violence later. We have only to look at the history of the French and Russian revolutions. I do *not* believe with Senator Goldwater that extremism in the cause of justice is a virtue.

I also sympathize profoundly with the embattled southern white in the dislocations which social change may force upon him. I do not consider anyone in the South or North *guilty.* White or black, we are all people with problems and we must help each other solve them.

With kind regards,
George S. Richardson, MD

A Walk in the Alabama Sun

The following on-the-spot report of the events of March 25, 1965 in Montgomery, Alabama, is a sequel to the letter by Dr. Richardson which is printed immediately above.

We arrived in Montgomery at dawn, and left in the early evening. Between those times, a long day, with scattered morning showers and a hot afternoon sun leaving a surprising sunburn.

At the forty-acre religious center of St. Jude, we are early arrivals, but not earlier than the 54-mile marchers, who stand in line to be fed at the canteen, or sleep in a posture of exhaustion on a gymnasium floor, or shave, or pray in English, Latin or Hebrew. Through the long morning more people come — from California, from Chicago, from everywhere — plain people, young and old, priests, ministers, nuns. Handmade signs tell of their origins and their feelings.

Gradually, a loose column, frequently doubled upon itself, fills the vast acreage of reddish mud. Birds sing, most of the leaves are out, and by the church of St. Jude, "the saint of the impossible," a flowering judas is in bloom. After hours of standing and waiting, we see distant banners begin to move, and the 54-mile marchers in their fire-orange jackets move out in the van. The field drains ever so slowly; eventually we too leave the gate.

Six abreast and more than a mile long, the human river flows, with singing, now front, now middle, now rear, through the Negro section, smiling and waving to people on porch and roadside, and into the city where expressionless faces stare through closed windows and look down from the taller buildings. High up in a hotel window, we see a colored face and wave, and receive a smile and a wave in return.

Then right angles and up the hill, the column goes to fill the square in front of the Capitol. There is just enough pavement to permit us to sit and to eat what we have brought. The Capitol is snow-white and quite handsome, with pines and magnolias before and beside it. There is a beautiful sky and a breeze for flags, but from the dome, it is the Confederate flag which waves. The road in each direction, like all intersections along the march, is guarded by soldiers in fatigue uniforms. On the Capitol steps, there is a row of green-helmeted state police, and others can be seen through the closed windows of the buildings which

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Walk in Alabama Sun . . .

Continued from Page 7

flank the square. The speakers are hidden from view by the crowd, but intensely present through the public address system. Endless speech-making; two elderly Negroes remark to each other that they're just saying the same thing over and over. To them it is too simply true to be merely moving.

But this does not dampen the impact of Martin Luther King's long speech. For it is at his call that we are here, and to those of us who have obeyed him, the wise and the simple, he reveals in the toils, the conflicts, and the sufferings through which those in his fellowship have passed, by what authority he speaks. The triumphant entry into Jerusalem has taken place, Hosanna has been sung to the indifferent and hostile ears. And now what follows? Does it have to be Calvary again? Or can America fulfill the American dream?

The crowd is dismissed in groups, easily and silently. All know that this is the dangerous time. As the square empties, an unnoticed monumental plaque is revealed. "In this square on April 13, 1861, took place the Inaugural Parade for Jefferson Davis." Its fresh white surface is undefiled.

We have been privileged at home; today has added another privilege. Henceforth at home we will support nonviolence as represented by Martin Luther King and the Southern Christian Leadership Conference, and try as we may to stem the tide of extremism, black or white.

George S. Richardson, MD

Dr. Chester M. Jones, a member of the MGH Board of Honorary Physicians, became an Honorary Fellow of the Division of Medicine in the Royal College of Physicians and Surgeons of Canada at its convocation in Toronto on January 21. At the same meeting, **Dr. William B. Castle** delivered the Lecture in Medicine on the subject of polycythemia. Dr. Castle was an MGH intern (East Medical Service, 1923), won the MGH Warren Triennial Prize in 1928, and later became director of the Thorndike Memorial Laboratory at Boston City Hospital and Francis Weld Peabody Faculty Professor of Medicine at Harvard.

Mrs. Constance L. Braman, director of the Phillips House nursing service for 15 years, died therein on March 17. She was a graduate of the MGH School of Nursing and held a master's degree in nursing administration from Boston University.

Dr. Amos I. Chernoff, a former MGH intern (Medical Service, 1948), was recently appointed director of the University of Tennessee Research Center at Knoxville. In 1962 he received a career grant from NIH for research in hematology.

The Instrument Shop, headed by **Mr. Carl Althausen,** has been incorporated into the organization framework of the Maintenance Department and will soon move from the Octagonal Building into the Cambridge Street Garage.

These photographs by John Fields show preparations for the erection of the temporary buildings that will house units displaced during the erection of the Surgical and Special Services Building.

The NEWS of MGH

Vol. 24, No. 4 Boston, Massachusetts May 1965

Role of Vitamin B_{12} in DNA Synthesis Is Discovered

By William S. Beck, MD

EDITORIAL NOTE: The discovery of the role of vitamin B_{12} in DNA synthesis, recently made in Dr. Beck's laboratory, sheds light on the nature of megaloblastic anemia and the mechanism of cell division. Dr. Beck is Chief of the Hematology Unit, MGH, and Assistant Professor of Medicine, Harvard Medical School.

The megaloblastic anemias are among the few fundamental abnormalities of erythropoiesis that can be reversed. At least this can be said of most of them — for although megaloblastic anemia occasionally appears in ill-defined circumstances, most cases are ultimately due to tissue deficiencies of vitamin B_{12} or folic acid or their active forms. Therefore, the only treatment that is ordinarily needed to convert the morphology of marrow erythrocyte precursors from megaloblastic to normoblastic is repletion of the lacking nutrient.

Nature of the Megaloblast

The characteristic morphological features of the bone marrow megaloblast are: (1) large cell size; (2) increased ratio of cytoplasmic to nuclear area; (3) cytoplasmic basophilia; and (4) a typical fine-grained texture of the chromatin. Beyond these changes in the individual cells, the marrow as a whole is usually quite full. There are more erythroid cells than myeloid cells, the majority of the erythroid cells are quite immature, and many mitotic forms may be present. Indeed, many of these cells die before they can mature and enter the blood.

Megaloblasts are obviously difficult to obtain in quantity for biochemical study. Nevertheless, it is established that they have elevated RNA/DNA ratios. Presumably the high RNA content is reflected by the cytoplasmic basophilia. It is apparent that their primary difficulty is not excessive RNA synthesis but rather an inability to duplicate their DNA. Since they avidly incorporate into DNA radioactive precursors such as thymidine whenever they are provided experimentally, it may be assumed that megaloblastic cells are fully capable of converting small DNA precursors into a large molecule. The problem appears instead to be a block in the endogenous synthesis of DNA precursors.

It appeared to us a few years ago that the megaloblast is a cell in a state of "unbalanced growth." This term was first used by Seymour Cohen to describe a pattern of growth observed in a thymineless mutant of *E. coli* (strain $15T^-$). When starved of exogenous thymine (but supplied with its other required nutrients), this auxotroph fails to synthesize DNA in significant amounts but continues for a time to produce RNA and protein. The cells become elongated or filamentous and, since they fail to produce clones on solid media, they must be

Continued on Page 6

Breaking ground for Shriners Burns Institute on Patriots Day (story on Page 2). Left to right (with shovels): John E. Lawrence, Chairman of MGH Trustees; Dean George P. Berry, HMS; Imperial Potentate O. Carlyle Brock; and Imperial Sir Robert G. Wilson, Jr. Paul Revere is impersonated by Julius T. Fedell.

Ground Broken for Shriners

The ground-breaking ceremony for the Shriners Burns Institute was held on Patriots Day, April 19, on the Blossom Street plot opposite the MGH Research Building. In addition to representatives of the MGH and the Ancient Arabic Order of the Nobles of the Mystic Shrine, there was present a picturesque gentleman resembling Paul Revere, who arrived on horseback carrying a lantern like the ones used in the belfry of the Old North Church in 1775.

After the ceremony a luncheon was held at the Museum of Science, where a group of Rhode Island Shriners presented a gift of $7,500 to the Board of Governors of the Burns Institute. The chairman of this board is the Honorable Robert G. Wilson, Jr., who is a Past Imperial Potentate of the Shriners and judge of the Suffolk Probate Court.

Dr. Oliver Cope of the MGH Surgical Services is Chief of Staff of the Institute. Among his staff are Drs. John D. Constable, John F. Burke, and John D. Crawford, all of MGH. A small interim unit of the Institute is functioning in the Children's Surgical Service of MGH. The new hospital will be a 30-bed unit for the free treatment and rehabilitation of badly burned children, with ample facilities for research and teaching. The annual operating cost of $1.5 million will be financed by the Shriners.

Dr. Oliver Cope and Imperial Potentate O. Carlyle Brock share the honor of wielding the shovel. Close behind them stands Imperial Sir Robert G. Wilson, Jr. At right is Lt. Gov. Elliot L. Richardson; at left, Dr. Paul S. Russell.

The NEWS of MGH

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Per Diem Inpatient Costs MGH — 1964

ROUTINE COSTS:	
Maintenance, building services, laundry, business and administrative offices, etc. (comparable to hotel costs)	5.80
Food and special diets	4.85
General nursing services	11.10
Student nursing services	2.26
House officer services	2.48
Depreciation	.45
Other routine costs	4.05
(Subtotal)	($30.99)
ANCILLARY COSTS:	
Operating room	5.54
Anesthesia	2.47
Radiological diagnosis, Rx	2.90
Laboratory and pathology services	5.26
Electrocardiograms	.31
Physical therapy	.41
Medical supplies	.65
Drugs	1.57
(Subtotal)	($19.11)
TOTAL COSTS	$50.10

Nurses Glee Club

The newly formed Glee Club of the MGH School of Nursing presented a spring concert on April 21 in the Moseley Lecture Hall. This 35-voice group is directed by Judith Gilbert and Florence Havens, and the accompanist is Maureen Brennan. Six of the girls sang special numbers under the name of "Flo and the Nightengales." Two members of the faculty, Mrs. Ann Nozawa and Miss Margaret Mulry, serve as advisors.

On Sunday, May 2, the Glee Club participated in a program in the Hall of Flags at the State House, sponsored by the Daughters of the American Revolution.

MGH COSTS: "Our expenses have been increasing at an annual rate of 6 to 7%," stated Dr. John H. Knowles in his recent Lowell Lecture. "This is due to the 'professional care' element (i.e., those things and people one needs in a hospital but not in a hotel) and not to the hotel function. Three quarters of patient income goes into the salaries of our employees, and yet most hospital workers remain grossly underpaid."

Miss McLaughlin Retires

A host of friends of Miss Anna R. McLaughlin, who has retired after four decades of service as secretary to the General Director, attended a reception given in her honor on the afternoon of April 29, 1965, in the Walcott House.

Dr. John H. Knowles, General Director, presented Miss McLaughlin with the following citation on behalf of the Board of Trustees and the Administration:

"To you, Miss Anna McLaughlin, I have the privilege of presenting this Citation from the Hospital on behalf of the Trustees and the Administration in recognition of your years of selfless devotion in a position of many responsibilities. Particularly outstanding among your varied contributions to the best interests of the MGH has been the gracious and efficient manner in which you have filled the role of Secretary not to just one, but to five successive General Directors of this institution — distinction without parallel or precedent. Our affection, respect and good wishes go with you."

A Personal Tribute

The following tribute to Miss McLaughlin was written by Dr. Nathaniel W. Faxon, Director Emeritus, whom she served from 1935 to 1949:

Anna R. McLaughlin came to the MGH on April 10, 1925, as secretary to the Director, Dr. Frederic A. Washburn. In conformity with the retirement policy of the Hospital she left on April 30, 1965. During her forty years of service she endeared herself to six successive directors: Washburn, Bigelow, Baker (an acting director), Faxon, Clark, and Knowles.

She and I worked together for 14 years, and never during all this time did I ever hear her speak crossly to anyone; her voice was always soft and pleasant, no matter how stupid or irritating the other person might be. Moreover, she was a most efficient secretary. She recorded the minutes of the General Executive Committee, the Trustees Committee on the General Hospital, and the Board of Trustees. She took dictation rapidly and correctly and with equanimity regardless of whether I sat in my chair or wandered about the room seeking to stimulate my thoughts.

Of course, every director and every secretary always has a pile of papers on the desk awaiting disposal. Once in a while I would want a particular paper or letter which could not be located in the files. The procedure that followed always reminded me of what happens when two dishes of food are placed before two dogs. Each dog will eat about three quarters of his meal and then saunter over to his companion's dish and finish that. This is about what we did. After Miss McLaughlin reported that the wanted paper was not in the files, I would go through the pile on my desk while she examined her pile. If still not found, I would accuse her of hiding it and she would look reproachfully at me and then each of us would go through the other's pile. We always found the paper and she was usually right.

Such episodes must have tried her patience, and it was a real test of ability and character to have worked with and satisfied six directors, or perhaps I should say, autocrats. I am sure all regarded her with affection and esteem. Her knowledge of the past history, procedures and policies of the Hospital made her a veritable encyclopedia, and so when any question arose that nobody else could answer, her knowledge was sought — and usually successfully.

When there is mutual respect and esteem between a director and his secretary, efficiency and harmony result to the great benefit of the Hospital. During my years of association with Miss McLaughlin this desirable relationship existed. To me she was the perfect secretary. Quiet, courteous, efficient; her calm, dignified deportment impressed visitors and encouraged similar dignity and deportment from employees. She shielded me from unnecessary minor problems; reminded me of what would have been otherwise forgotten appointments; corrected my spelling and made helpful suggestions. She was a helper and comfort through many stormy periods.

We all know that no individual is indispensable to a great institution like the MGH. But some persons make greater contributions and leave a greater impress of their personality and character than others. Anna R. McLaughlin contributed much, and her forty years of service have left the imprint of her character and so have enriched the soul of this great institution. Her many friends and coworkers wish her good health and many happy and prosperous years to come.

MGH CHARGES: "The word 'cost' represents the raw or actual cost of taking care of the average patient for one day," Dr. Knowles says. "Our average *charge* per day has been roughly $10 greater because of losses due to Free Service, inadequate welfare reimbursement, Blue Cross contractual losses, bad debts, etc."

Honors and Awards

Dr. W. Gerald Austen, Chief of the Surgical Cardiovascular Research Unit, recently was named one of the "Outstanding Young Men of the Year" by a panel of civic and business leaders set up by the Greater Boston Junior Chamber of Commerce. The basis of selection for this honor emphasized both professional achievement and community service. The men were honored at a banquet given on April 24 at the Sheraton Plaza Hotel. Dr. Austen's research is primarily in the area of cardiovascular physiology. He has played a major role in the surgical treatment of the cardiac patient.

Dr. Jack H. Mendelson of the Psychiatric Service has been awarded the Hofheimer Prize ($1,500) by the American Psychiatric Association in recognition of his studies of experimentally induced intoxication in man for the purpose of investigating the chemical and mental effects of alcohol.

The Association of Military Surgeons of the United States has authorized an annual **James Clarke White Award** in dermatology, to be sponsored by the Eli Lilly Company of Indianapolis.

Dr. White, who served on the MGH Staff from 1863 until retirement in 1902, was the pioneer American dermatologist. He became Professor of Dermatology in the Harvard Medical School in 1871, when it was located next to MGH. In 1876 he was a cofounder and first president of the American Dermatological Association, and was president again in 1897.

The first presentation of the new award will take place at the annual meeting of the Association of Military Surgeons, in Washington, D. C., next November. A special guest at the presentation will be Dr. James Clarke White, former Chief of the MGH Neurosurgical Service and Harvard Professor of Surgery at MGH, Emeritus, who is a grandson of the pioneer dermatologist.

Dr. Howard A. Hoffman of New Bedford, Mass., an alumnus of the MGH Urology Service (1946), has served two terms on the *S. S. HOPE:* from June through August, 1964, at Guayaquil, Ecuador, and in January and February, 1965, at Conakry, Republic of Guinea. Dr. Hoffman plans to rejoin the staff of the *HOPE* again in January 1966, when it sails to Nicaragua.

A Letter from Copenhagen

To The NEWS of MGH:

April 8, 1965

I find that my sabbatical year at the University of Copenhagen is the continuation of a long tradition of exchange between Boston and the Danish capital, starting perhaps with Dr. Edward Churchill's presence here in Professor Krogh's laboratory in the mid-1920's. This continuum was driven home by a recent note from Dr. Henry Beecher, reminding me that he was here in 1935 studying the very same problem that occupies my lab time — the riddle of small vessel control mechanisms. It is humbling to learn again that there is so little new in one's personal offering.

New to me was the similarity between Boston and Copenhagen. This seaport contains a major percentage of the population of a country about the size of Massachusetts, and its brick buildings and tradition of academic excellence are much like ours. The medical arena here is filled with exciting and productive workers, each of whom has a counterpart in the MGH family. There would be great value in getting these kindred pairs to communicate with each other.

Instances of such tantalizing potential may be mentioned here. Reasons beyond mere courtesy call for mentioning first my present chief and old friend, Dr. Hans Wandall, who was a Clinical Fellow in Surgery at MGH in 1946. He is now director of the Institute of Experimental Research in Surgery in the University of Copenhagen. He is a pioneer in Denmark, bringing the surgical teaching and research methods, and particularly the professional attitudes of Dr. Churchill back to the place where they were perhaps in part conceived. His problems are in large measure those of Dr. Paul Russell.

Nils Bohr's son Hans is an orthopedic surgeon who brings his father's enthusiasm for nuclear physics into surgery through his use of radioisotopes in the study of bone metabolism and disease in the Ortopaedisk Hospital. I think he would love to meet his counterpart, Dr. Mel Glimcher, head of our Orthopedic Research Laboratories.

Dr. Thomas Delorme, our orthopedic surgeon, is held in great honor over here. The Danish army incorporates his thinking in its training program in lifting technique, which has spread to the Danish rehabilitation clinics. Tom should see what the Danes are doing with back injuries.

The theory of social psychiatry developed by our Dr. Erich Lindemann is being put into practice in Denmark by Dr. Ebbe Linnemann in his "Night and Day" mental hospital. Mutual contact could give MGH greater confidence and courage in continuing the development of this field.

My experience as a close observer of the Danish National Rehabilitation Clinic system in its growth, together with my studies here in the Department of Cultural Sociology, indicates to me that there is quite a difference between socialized medicine and *social responsibility* in medicine. This small, closely knit country can be looked upon as an exciting laboratory experiment in sociology.

The Danes are aware of several major defects in the present set-up, and are in a turmoil of activity to correct them. Clearly apparent is the need for awareness and responsibility in the individual citizen, and also the need for development of a teaching establishment to get this across. The Medical School here is carrying the brunt of the burden, since so many social problems present themselves in medical terms. Although this country may lead us in putting theory into practice, Boston appears a little ahead of Copenhagen in the academic area, largely because of the extent of our development of departments of public health and sociology.

Probably every major city looks like the center and origin of things when one lives in it for a while. So we call Boston the "Hub," but this feeling is particularly easy to acquire in Copenhagen. Here is an important historical source of our language and our law, and Copenhagen is the current, active center of a great number of international activities. Most interesting are various international centers for education, and prominent among those is the program resulting from Copenhagen being the European Headquarters of the World Health Organization. These courses are attended by many doctors from outside Europe, who represent the same diversity seen in the MGH courses which are part of the Harvard Postgraduate Training Program. Here these visiting doctors seem to bring as much new information as they carry away, and as a result all participating countries can be called "developing."

This exchange is emphasized in the WHO surgical courses run by Dr. Wandall, and I've had the opportunity to learn about modern surgical management of such rarely seen "textbook" curiosities as neonatal tetanus, intestinal perforations and other complications of typhoid and dysentery, and parasitic diseases such as echinococcus cyst, and have learned these lessons from men who have had an enormous daily experience of educational value.

Rehabilitation is a wonderful medical concept since it so disregards ethnic, national, and departmental boundaries. This feeling is perhaps shared by Dr. Gordon Scannell and others who have served on the *S.S. HOPE,* and is a major part of the growing fun and sense of accomplishment in this year among Danish friends.

Sincerely,

Robert S. Shaw, MD

Ralph Lowell Studios

Mr. Ralph Lowell, a member of the MGH Board of Trustees since 1940, has been honored again. On May 1, 1965, one day before the tenth anniversary of Channel 2, WGBH-TV, in a live broadcast entitled "Toward a New Era," the newly constructed building of that station was named the Ralph Lowell Studios.

Mr. Lowell was the founder, and is the president of the Lowell Institute Cooperative Broadcasting Council (WGBH), which now comprises 14 Massachusetts universities and other institutions. WGBH feeds 13 stations of the Eastern Educational Network, and also 86 stations of National Educational Television.

The former studio building, located near MIT, was destroyed by fire on October 14, 1961. The new building cost $1.6 million and stands on a 2-acre lot in Allston leased from Harvard University, near the School of Business Administration. Open House at the Ralph Lowell Studios was held on May 23, 1965.

Social Responsibility

"Medicine is firmly established as a biological science but has never achieved its full potential as a social science. Planning for the medical needs of the community must become a University interest. If the University is committed to the teaching hospital as a social as well as an educational instrument, it must encourage social research. I am firmly convinced that the last half of this century will be notable for its attention to the social problems of medicine and that triumphant solutions will equal biological discoveries in excitement and importance. Medicine will recognize its social responsibility." — Dr. John H. Knowles, General Director, MGH.

Treadwell Library

A "tempest in a teapot" occurred in the Treadwell Library a century ago, judging from this letter by Dr. Henry J. Bigelow to the Medical Board, dated Feb. 26, 1863:

"I have the honor to enclose a small bill of fines on 5 volumes taken from the Treadwell Library during the last year amounting in the whole to $154.00. I shall with pleasure pay the amount if it is the wish and intention of the Board to enforce the payment of similar past and future fines. . ."

At the meeting of the Medical Board on Feb. 27 it was disclosed also that Dr. Henry G. Clark's library fines totaled about $200. The Board resolved the matter with judiciousness. On the motion of Dr. Samuel Cabot, a member of the Library Committee, it was voted that all present fines be remitted and a new schedule of reduced fines be adopted. And Dr. Bigelow was reappointed a member of the Library Committee!

The Francis A. Countway Library of Medicine at HMS was dedicated on May 26 and 27. It brings together the extensive resources of the Boston Medical Library and the Harvard Medical Library, so that the Countway becomes the largest university-centered medical library in this country. New techniques and devices are being introduced to articulate the Countway with all other important libraries. An impressive program of addresses was presented at the dedication, including one by Dr. Howard B. Sprague, President of the Boston Medical Library and a member of the MGH Board of Consultation.

Correspondence

To The NEWS of MGH:

In the exchange of correspondence regarding Dr. Frederic Washburn and his edict forbidding side pockets in trousers which was said to have occurred about 1906, Dr. Nathaniel Faxon states that the order was rescinded "quite a time after this edict had been executed." I served on the West Medical Service from 1933 to 1935 and at that time side pockets were still missing from the uniforms issued to us. Hence the "quite a time" amounted to 29 years at least. I do not know when the privilege of having side pockets was granted to house officers.

Sincerely yours,

DANA L. FARNSWORTH, MD

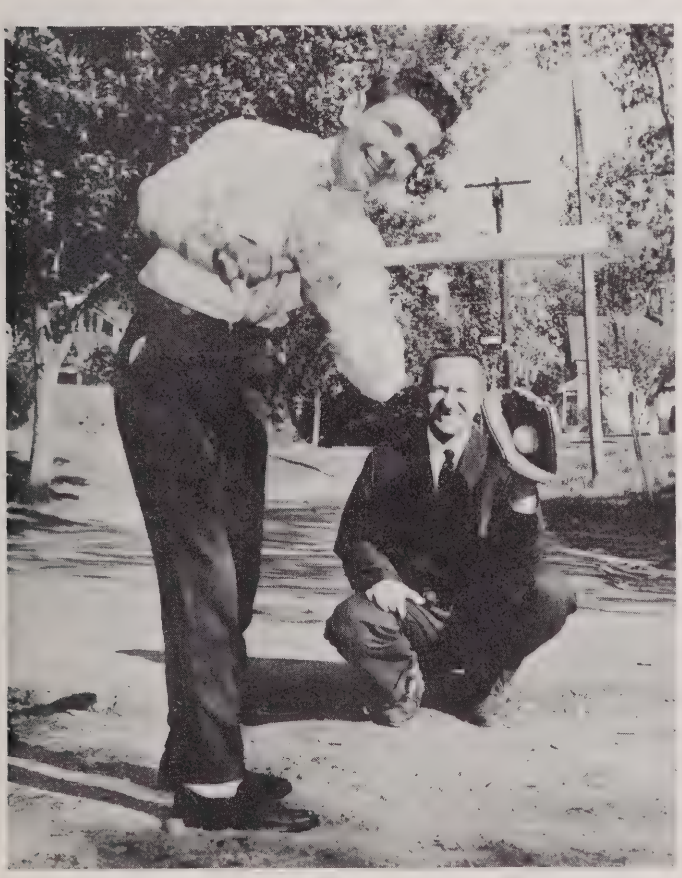
Two Friends

Two well-known former MGH patients, both of whom underwent replantation of a traumatically severed arm after separate train accidents, are shown directly below in a photograph taken by United Press International on May 22, 1964: Everett Knowles of Somerville as batter, and Lennart E. Turnquist of Reading as catcher. Knowles's operation occurred on May 23, 1962; Turnquist's, on September 6, 1963. They met each other for the first time when this photograph was taken.

Fate decreed, however, that on April 13, 1965, Mr. Turnquist was to die of a heart attack beside the railroad track near his home — the same track on which he had been struck previously by a train. He had been working regularly as a machinist, and his last visit to MGH for a check-up was made last fall. Surviving him are his wife, four sons, and three daughters.

Two Schools Move

The photograph directly below shows one phase in converting what was formerly the Winchell grammar school into a home for the MGH School of Nursing and the MGH School of Medical Illustration, together with the Visual Education Services Department. This 19th century structure was acquired from the City of Boston in 1963 after more than two years of negotiations.



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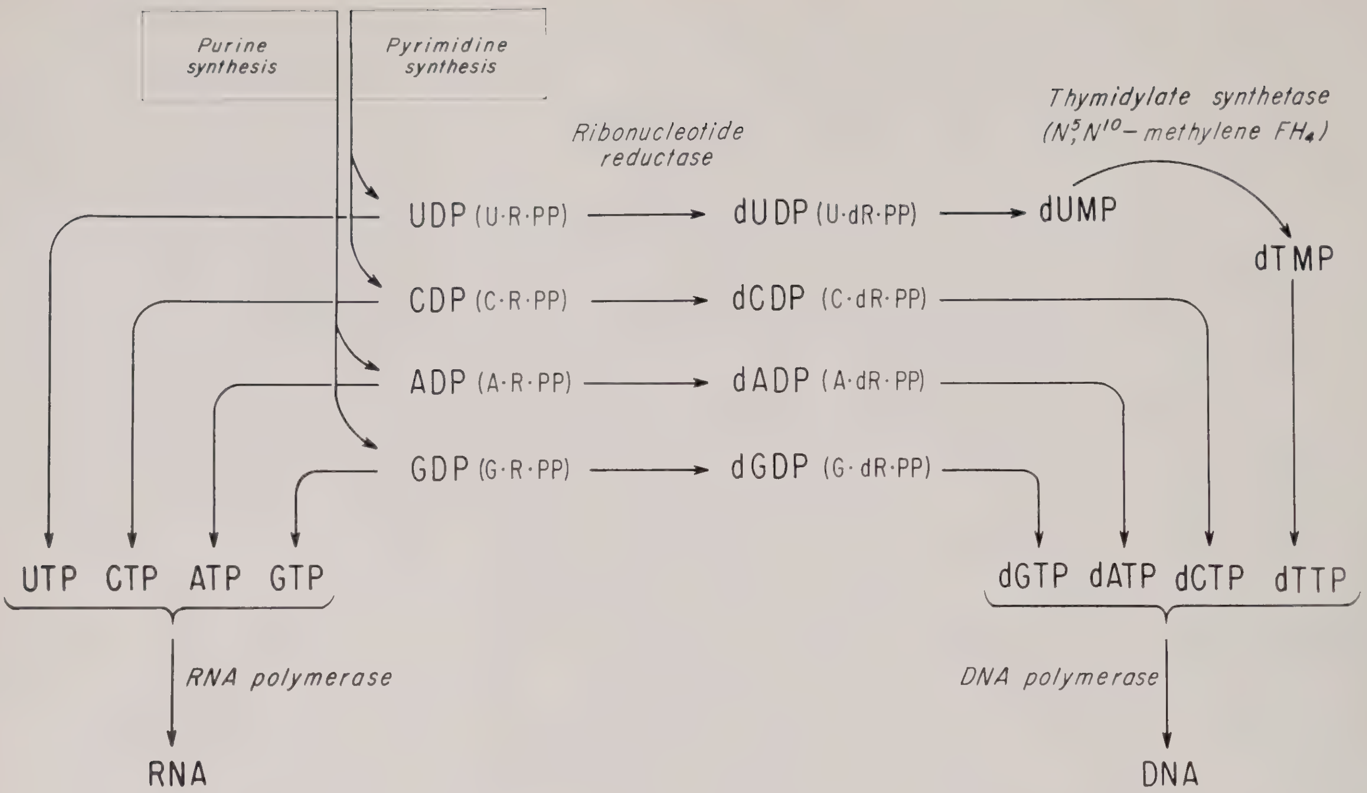


Fig. 1

Vitamin B_{12} . . .

Continued from Page 1

considered nonviable. We observed the identical phenomenon in vitamin B_{12}-requiring organisms such as *L. leichmannii* when starved of vitamin B_{12} or folic acid. These cells also became grossly elongated and displayed elevated RNA/DNA ratios and impaired cell division. We came therefore to regard these cells as model megaloblasts, and most of our biochemical data have been obtained with them.

In sum, the problem has been: why and how do deficiencies of folic acid and vitamin B_{12} impair DNA synthesis? I should like briefly to outline our current view of the answers to this question.

Folic Acid Deficiency

The metabolic scheme in Fig. 1 summarizes present knowledge of the synthetic pathways of RNA and DNA precursors. Note that the *de novo* synthesis of purines and pyrimidines yields *ribo*nucleotides. These are converted to the triphosphate level and polymerized to RNA. At the diphosphate level, however, a small portion of each of the four ribonucleotides is reduced by an enzyme called ribonucleotide reductase to the corresponding deoxyribonucleoside diphosphates. These too are converted to triphosphates which, in turn, are polymerized to DNA.

Interestingly, deoxyuridylate traverses a shunt pathway (at the monophosphate level) in which its uracil is converted to thymine, the characteristic pyrimidine of DNA. It is this step which requires a derivative of folic acid and whose impairment in folic acid deficiency accounts for the resulting defect in DNA synthesis. Although folic acid deficiency has several other metabolic sequelae, the biochemical lesion responsible for megaloblast formation is the decreased rate of synthesis of one DNA precursor, thymidylate. Thymidylate synthetase, the enzyme which catalyzes thymine methyl synthesis, has been purified and the evidence that the following reaction takes place is unequivocal:

Deoxyuridylate + N^5,N^{10}-methylene FH_4 → Thymidylate + FH_2

The reaction has no vitamin B_{12} requirement, though it is conceivable that a vitamin B_{12} deficiency *in vivo* could decrease the availability of N^5,-N^{10}-methylene FH_4. There is no compelling evidence that this occurs, however.

Vitamin B_{12} Deficiency

A considerable body of early indirect evidence suggested that vitamin B_{12} participates in the reductive conversion of ribonucleotides to deoxyribonucleotides shown in Fig. 1. This has included: (1) the well-known fact that the vitamin B_{12} requirement of *L. leichmannii* is eliminated by deoxyribonucleosides and not by ribonucleosides or free deoxyribose; (2) isotopic studies in *L. leichmannii* and in human bone marrow indicating poor conversion of ribosyl groups to DNA deoxyribose in vitamin B_{12} deficiency; and (3) decreased levels of acid-soluble deoxyribonucleotides in vitamin B_{12}-deficient bacteria with abrupt increases following repletion with excess vitamin B_{12}. Although such non-enzymological data were suggestive, the locus of vitamin B_{12} action could be established only by enzymological analysis.

The problem of demonstrating the reductive conversion of ribonucleotides to deoxyribonucleotides in cell-free systems was for some years a notoriously difficult one. Specific activities in crude extracts were always low, enzymes were unstable, and there was disagreement on the identity of the true substrate (-side or -tide, mono- or polyphosphate). Peter Reichard eventually demonstrated that there is such an enzyme and, as indicated in Fig. 1, that it acts mainly or exclusively on ribonucleoside *di*phosphates. In recent years, Reichard has partially purified the enzyme from *E. coli,* but despite purification, the *E. coli* enzyme has a specific activity of less than 3 (mμmoles deoxyribosyl formed per hour per mg of enzyme protein).

Because of the feebleness of reductase activity in crude bacterial extracts, we considered the possibility that the enzyme is under repressor control and that more active preparations might be obtained by de-repressing its synthesis. it was found that by transferring *L. leichmannii* (and other bacteria with similar requirements) into media containing no thymine, the rate of reductase synthesis could be greatly increased (Fig. 2). This not only provided the active system being sought, but also implied that the quantity of this key enzyme is variable and therefore may be of importance in controlling DNA synthesis.

Just at this time R. Blakley and H. A. Barker announced that vitamin B_{12} stimulated the synthesis of deoxyribonucleotides by a cell-free preparation of *L. leichmannii* (specific activity, 1.6). Our cell-free extracts containing de-repressed reductase were totally inactive unless cyanocobalamin was added *in vitro* (Fig. 3). A coenzyme form of vitamin B_{12} (known as DBC coenzyme) was twice as active, specific activities averaging 150 to 190. The enzyme also had absolute requirements for reduced lipoic acid, ATP, and magnesium.

An unexpected observation was then made. Our earlier studies had shown that in these bacteria vitamin B_{12} is concentrated in the ribosomes. The significance of this binding was unknown. We subsequently discovered a ribosomal vitamin B_{12}-binding protein which has since been semipurified and shown to be low-molecular weight acidic glycoprotein. It was of interest to know what would happen if the ribosomes were removed from our active reductase preparations by ultracentrifugation. When whole sonicates were tested for vitamin B_{12}-dependent reductase activity in the supernatant of a 144,000 x *g* centrifugation, it was observed that enzyme activity was completely inert when cyanocobalamin was added *in vitro,* but addition of DBC coenzyme increased reductase specific activity to 500.

From this it appeared that the ribosome is the locus of conversion of cyanocobalamin to DBC coenzyme, and that ribosomes actively bind coenzyme whether exogenously added or endogenously synthesized. When coenzyme is formed endogenously it is held in the ribosome until needed. Considerable evidence has now been obtained in support of this hypothesis.

In the experiment summarized in Fig. 4, different amounts of ribosome were added back to a constant quantity of supernatant. The shading denotes the composition of ordinary whole sonicate. In the absence of ribosomes, reductase activity is maximal with DBC coenzyme and virtually absent with cyanocobalamin. As ribosomes are added, more and more DBC is bound to the ribosome (and thus made unavailable to the enzyme). At the same time, the capacity to use cyanocobalamin is increased as ribosomes are added. At higher ribosome levels, however, binding activity exceeds activating activity.

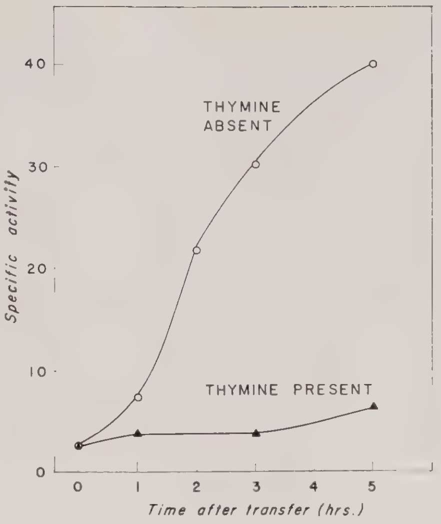


Fig. 2

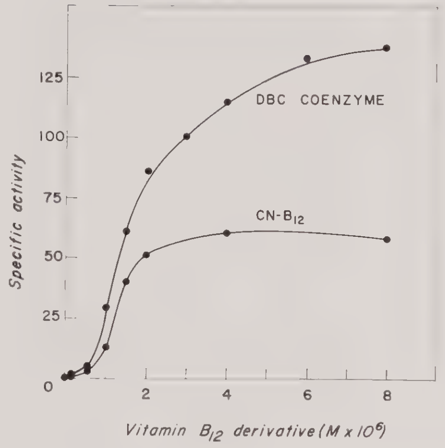


Fig. 3

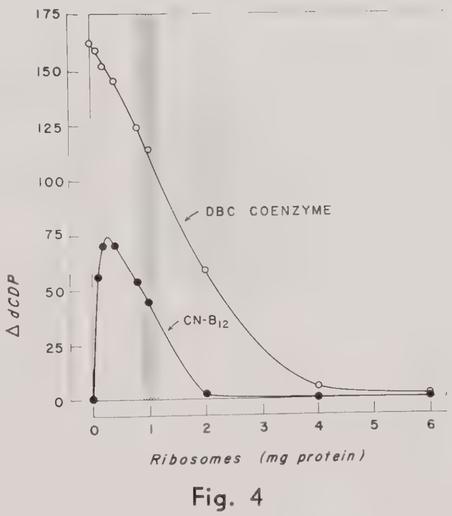


Fig. 4

In summary, we believe that in *L. leichmannii* cyanocobalamin enters the cell and is cleaved to hydroxocobalamin. Hydroxocobalamin is gathered to an activation site on the ribosome by a binding glycoprotein (much as the mammalian glycoprotein, intrinsic factor, gathers vitamin B_{12} to an absorption site). Evidence that this occurs only on certain ribosomes has recently been obtained in our laboratory. On the ribosome, hydroxocobalamin is converted in an ATP-dependent reaction to the coenzyme form required by ribonucleotide reductase. Coenzyme B_{12} is released at a rate determined by as yet unknown equilibrium kinetics, and it serves as cofactor for reductase molecules in the soluble phase of the cell.

This enzyme system is the critically important one that provides the building blocks of DNA. The demonstration of its absolute dependence upon the coenzyme form of vitamin B_{12} indicates that impairment of this step accounts for the unbalanced growth of vitamin B_{12} deficiency. The fact that the enzyme itself is subject to repressor control is of potential interest in connection with the unsolved problem of the regulation of DNA synthesis.

Important questions remain to be answered. Is the proof unequivocal that the ribosome is the locus of activation and that DBC coenzyme is the product of activation? What is the mechanism of action of DBC coenzyme in the reductase reaction? What is the boilogical distribution of this phenomenon? Does it have anything to do with megaloblastic transformation? These are problems for future investigation.

MGH Pops

MGH Night at the Pops — the first ever held — will occur on Wednesday, June 9 at Symphony Hall. Arthur Fiedler will conduct the Boston Pops Orchestra. Mrs. H. Dunster Howe, past president of the MGH Service League, headed the committee that made the arrangements for this event.

Chapel Concerts

This year's Chapel Concert series ended on April 28 with the music of Brahms and Couperin, as played by Imke Heitmann, cellist, and pianist Carol Rand.

The biweekly concerts are one of the activities sponsored by the MGH Service League for the benefit of patients and visitors to the Hospital. Since their introduction in 1953 the Chapel Concerts have brought enthusiastic response from many people who have heard them.

Mrs. Nathan Talbot is in charge of the general planning of the half-hour programs, assisted by members of the Service League. Another series of concerts will begin in October.

These photographs show early phases of the construction of several temporary buildings that will house displaced units during the grand building program at the MGH. (Lower left photograph by Hannalore Steinbeck; other three by John J. Fields.)

The NEWS of MGH

Vol. 24, No. 5 Boston, Massachusetts June-July 1965

Rebuilding: A Perpetual Process

The crunch of iron jaws and the rumble of falling bricks reverberated around the MGH the first week in June, when the old Power House was being demolished. Later this summer, the old Pathology Building, the morgue, the Octagonal Building, and the Domestic Building will also be torn down, making way for the new Surgical and Special Services Building.

The displaced units will move soon into temporary structures, which will in turn be dismantled when these units acquire permanent quarters under the rebuilding program.

The old structures now being demolished were well adapted to the requirements of 19th century MGH. It was then a small institution caring primarily for the "sick poor." There was no Baker Memorial for patients of moderate income, no Phillips House for those of higher income. Nor was there any organized research program calling for hospital space.

The Octagonal Building behind the Bulfinch was erected in 1846 to permit expansion of the kitchen and laundry services. It was designed by a member of the MGH Board of Trustees, George M. Dexter, who was a professional architect of note. It was part of a larger expansion program in which two wings were added to the Bulfinch Building.

The discovery of ether anesthesia, the subsequent increase in number of operations, and the consequent increase of cross-infection in crowded surgical wards gave rise to a separate operating building (1868) and a series of isolated pavilion wards. These early structures have long since been razed.

The Pathology Building, a two-story structure erected in 1896, had a different impetus: the example of the Johns Hopkins University and Hospital, which had imported German methods of research and teaching and had clearly forged ahead of Harvard and Boston in those two areas. A similar pathology building at the Boston City Hospital was opened several months before its counterpart at MGH.

Prior to 1896 the small amount of pathological research done at MGH had been confined to a 6 x 10 foot room on the ground floor of the Bulfinch. Under the able direction of Dr. J. Homer Wright, the Pathology Building became the scientific center of the Hospital and remained so until suites of laboratories for organized clinical investigation appeared in the Bulfinch shortly after World War I.

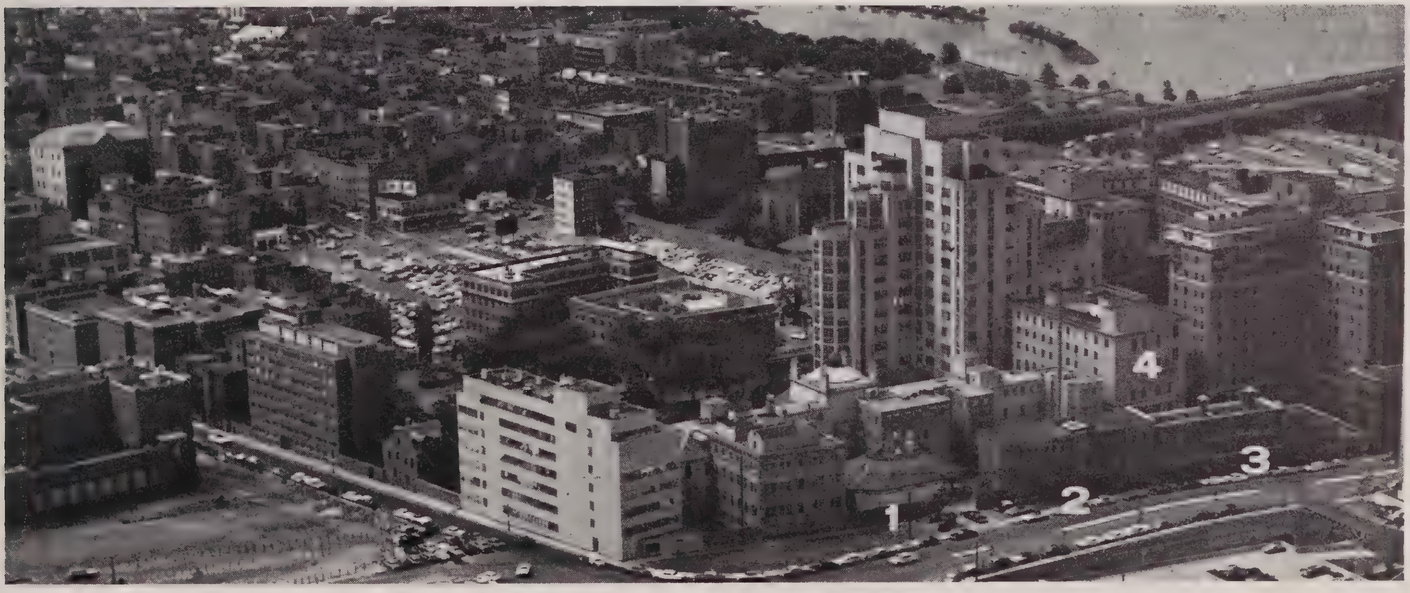
The first report of the Pathology Laboratory was issued in 1898 and listed 22 articles. The high-power photomicrographic plates so impressed the Board of Trustees that in their own report for 1899 they presented two plates illustrating the Widal test for typhoid bacilli. One Trustee, Mr. Francis Blake, became so interested in pathological technique that he designed a microtome to slice tissue sections as thin as 1/25000 of an inch.

The Power House, erected in 1898, was designed to supply steam and electricity to both the MGH and the Massachusetts Eye and Ear Infirmary. Its chimney periodically belched forth black smoke and soot over the neighboring West End, and in the early 1900s its six upright boilers, two stories high, consumed up to 7400 tons of soft coal annually. Its ice plant could provide up to eighty 100-lb. cans of ice in a single operation.

The Chemistry Laboratory started with the appointment of Dr. Franz Pfaff as chemist to the Pathology Laboratory in 1896. Three years later an additional floor was built on the Path-

Continued on Page 2

Numbered buildings in process of demolition at MGH: 1 — Octagonal Building. 2 — Power House. 3 — Pathology Building. 4 — Domestic Building. (Photo by Stanley Bennett from a helicopter)



ology Building and adjoining Power House, and Dr. Pfaff found space for his own laboratory.

A population explosion exerted the main pressure acting upon the MGH late in the 19th century, when the Cunard and other steamship lines transported thousands of impoverished immigrants at low steerage rates to Boston's North End and West End. For a time the North End had the highest concentration of inhabitants per square acre in the United States. Disease was rampant, and at MGH all available beds were in constant demand and the outpatient clinics were pitifully overcrowded. Busy doctors and nurses found less time for the amenities of patient care, and it was this situation that impelled Dr. Richard Cabot to conceive of medical social service, with its emphasis on the social component of etiology and therapy.

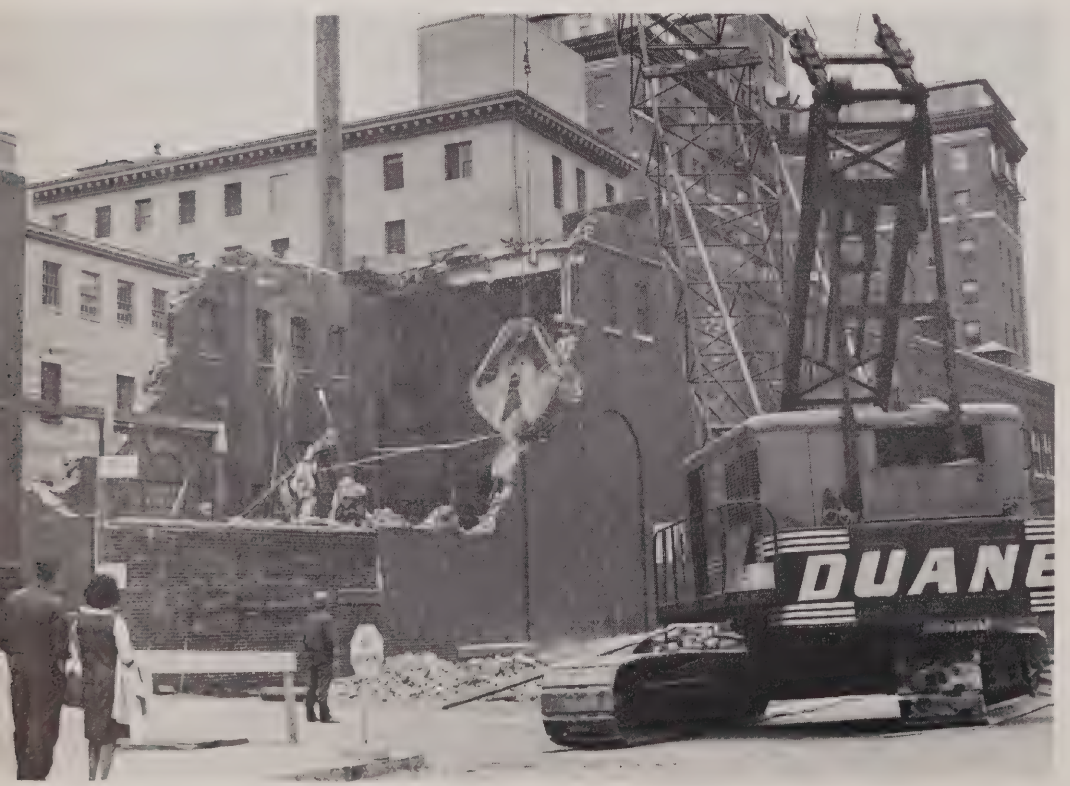
The Board stated in the annual report for 1899: "The Trustees have given much attention to the problem of an ultimate rearrangement and extension of the General Hospital plant. As this plant is the result of gradual and erratic growth during the last 81 years, it is not surprising that much must be done to bring it up to the requirements of modern medical and surgical practice, and economical administration."

From their planning emerged the second operating building (1900), the Domestic Building (1901), and the Outpatient Building (1903).

Director Knowles and Comptroller Martin. (Photo by Clayton Hubbard.)

The Domestic Building was designed by the architects Wheelwright and Haven, who specified fire-resistant materials wherever available. The color of the exterior brickwork was a grayish yellow which was thought to harmonize with the Chelmsford granite of the adjacent Bulfinch Building. The Domestic Building provided space for the kitchen, dining rooms, storerooms, apothecary shop, photographic and X-ray studios, and dormitories for domestic employees.

In later years, as some of these units moved into newer quarters, others took their place in the Domestic Building, such as the Department of Physical Medicine and the Blood Bank.



"The crunch of iron jaws." (Photo by Thomas Stebbins).

The Octagonal Building was turned over to the laundry service completely in 1901, after the kitchen service had moved into the Domestic Building. The advent of antisepsis and asepsis had vastly increased the quantity of linen and gauze that had to be washed daily. Electrical equipment was brought into the laundry.

Very recently, the Hospital entered into a contract with an outside laundry service, and the Octagonal Building and its additions have been taken over by such units as the Orthopedic Shop, the Print Shop, and the Electronics Laboratory.

In 1916 the Hospital discontinued the manufacture of electricity and entered into a contract with the Edison Electric Illuminating Company. The Power House continued to supply steam until 1938, when the electric company was contracted to supply steam as well as electricity to the Hospital.

Subsequently the Power House provided space for such diverse units as the Carpenter Shop, Paint Shop, Metal Shop, nurses' science laboratory, School of Medical Illustration, and others. At present, most of the maintenance shops are moving into the warehouse at 12 Garden Street, near the Cambridge Street Garage.

The School of Medical Illustration and the Medical Art Unit have already moved into the old Winchell School, which is occupied primarily by the School of Nursing.

The Chemistry Laboratory moved from the Pathology Building and Power House to the Bulfinch Building in 1925, and to the Domestic Building in 1952.

The old structures now disappearing

Hartford Grant Aids Liver Study

The John A. Hartford Foundation of New York has awarded a grant of $280,000 to the Gastrointestinal Unit of MGH for a 3-year comprehensive study of the metabolic aspects of liver injury. Previous support for this project has been given by the Hartford Foundation (*The NEWS,* October 1963).

The principal investigator is Dr. Kurt J. Isselbacher, Chief of the Unit and associate professor of medicine at the Harvard Medical School. He will be assisted by Drs. David Alpers, Seymour Sabesin, Dharam Datta and Kay Tanaka.

Dr. Isselbacher states: "Very little information has been obtained to date by any investigators concerning the mechanisms of liver injury, and as a consequence very little has been accomplished in providing an effective treatment for liver disease and its complications."

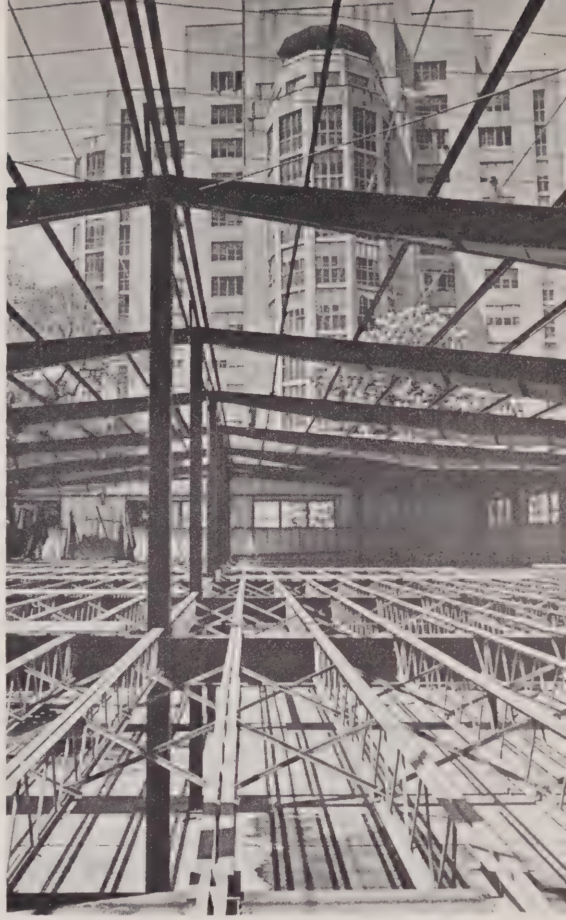
He adds, however: "Significant progress has been made in a number of areas relating to liver injury in the short period during which this project has been sponsored by the Hartford Foundation."

As one example, the MGH investigators have obtained knowledge of the mechanisms leading to the production of the fatty liver. In experiments with agents such as alcohol, carbon tetrachloride and puromycin, it has been shown that an impairment in the liver's ability to synthesize and secrete lipoproteins results in the accumulation of fats (lipids) in the liver. It has been observed that the levels of adenosine triphosphate (ATP) drop under these circumstances and that the fatty liver can be prevented or modified by injecting precursors of ATP.

One of the areas of the study is to determine the earliest lesion which may occur in the liver cell following exposure to a toxic agent. Recent experiments with carbon tetrachloride injury suggest that the lysozomes of the liver cell are one of the first organelles to be damaged. Under these conditions the lysozomes release enzymes that appear to attack and destroy the ribonucleic acid. Such a sequence of events may be the mechanism for the impairment of protein synthesis and the fatty liver seen with liver injury.

It is hoped to extend these observations to patients with viral hepatitis. For the moment, however, since the human hepatitis virus has not been isolated, experiments will be carried out in mice infected with a mouse hepatitis virus. Infected liver cells will be examined by biochemical techniques as well as with the electron microscope.

Dr. Isselbacher concludes: "We hope our studies will show us how to modify the liver's response to injury and how to more effectively permit the liver to regenerate after disease or after surgical removal of a substantial part of this organ."



Framework of a temporary building. (Photo by John J. Fields)

The NEWS of MGH

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from the north side of the Hospital along old Allen Street (renamed Blossom Street) looked shabby in comparison with such newcomers as the Warren Building, but the MGH will never forget the medical scientists and the Dalton Scholars who achieved great medical progress within their walls two generations ago: Reginald Fitz, Homer Wright, Franz Pfaff, Richard Cabot, Franklin White, Mark Richardson, Elliott Joslin, William Smith, Edwin Locke, Joseph Pratt, Frederick Lord, Wilder Tileston, Samuel Robinson, Walter Dodd, George Holmes, Louis Newburgh, George Minot, and more.

The New Building

Having paid homage to the achievers of the past, we turn to the resetting of the stage for future progress. And what a magnificent stage there will be for the new surgery and its supporting services. This stage takes the form of a 14-story extension of the White Memorial Building.

In the words of Dr. Knowles, the Surgical and Special Services Building "will stand as a prototype of advanced hospital design." He adds, "The needs of the community and the necessity for good regional planning have been foremost in our planning."

The Surgical Services will gain 20 operating units on the third floor, and their supporting services will occupy the floor above. The chemical, bacteriological, and other clinical laboratories will be located on another floor. The Radiology Department will eventually occupy most of the second floor, as it already does in the adjoining White Memorial Building.

The Blood Bank and Transfusion Service and the administrative services involved in one way or another with patients will be conveniently located on the ground floor. The basement will be largely the domain of the Dietary Department and the central stores.

All of these floors are expected to be fully occupied before the close of 1968. In addition, an exterior shell for nine upper floors will provide for the future expansion of patient care services. Completion of these ward areas will be the primary goal of the Administration for some time to come.

Dr. Knowles comments: "Those of us close to the workings of the MGH know how desperately the proposed new building is needed. The plans have been reviewed extensively with practically every member of the Staff and have their unflagging and unanimous approval and backing."

Dr. Frederic A. Washburn, former Director of MGH, wrote in 1939: "The growth of a modern hospital in bricks and mortar is necessarily the story of tearing down and building, and tearing down and building again." GHJ

MGH Authors

THE BIOLOGY OF TISSUE TRANSPLANTATION. By Paul S. Russell, MD, and Anthony P. Monaco, MD, Boston: Little, Brown & Co., 1965.

A surprising amount of knowledge emanating from the new science of transplantation biology is compressed into 161 octavo pages in this monograph. Its material is drawn from articles published under the heading of Medical Progress Series in the *New England Journal of Medicine,* beginning in September 1964.

When requested by the Editorial Board of *The NEWS* to comment on the meaning and purpose of this book, Drs. Russell and Monaco submitted the following:

A Statement by the Authors

The replacement of diseased or worn out organs with new ones has been the hope of both ancient and modern medicine. The surgical techniques to accomplish this have been available for at least fifty years, and recent advances in vascular surgery serve to underscore the feasibility of organ transplantation.

What has prevented widespread clinical transplantation is the response of the recipient, in whom the transplanted organ is recognized as foreign and rejected by what is now understood to be an immunological reaction. This complex process of rejection of transplanted tissues is a fundamental *biological* process, and its understanding and elucidation is the key to eventual widespread clinical transplantation.

It is not surprising therefore that the nature of the reaction by which tissues are rejected is being studied all over the world by individuals trained in various basic scientific disciplines — genetics, biochemistry, immunology, ultrastructure — to name just a few.

The purpose of the *Biology of Tissue Transplantation* is to bring together this vast amount of new information and experimental data from the various basic science disciplines in an organized fashion. It should be emphasized that the field of tissue transplantation is one area of modern medicine where the clinician and the basic scientist have profited by mutual interchange in their common efforts to solve the transplantation problem.

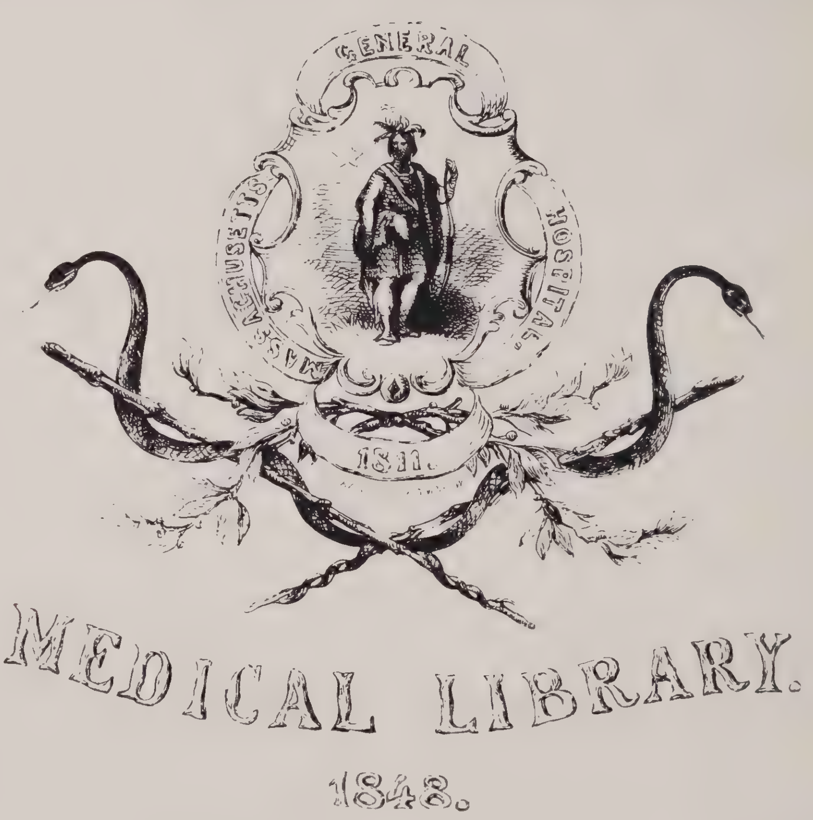
Several sections of the book illustrate our feeling about future advances in this field. Generalized and total suppression of the individual's immune reactivity (currently practiced in clinical renal transplantation) is fundamentally undesirable since it gives rise to a variety of problems of immunologic insufficiency, such as severe infections. Therefore, a large segment of the book deals with *specific* alteration of the recipient and ways of inducing tolerance (the opposite of rejection) to specific organs or tissues.

Another section of the book deals with genetically determined chemical substances in tissues which make the tissues foreign to recipients, i.e., the transplantation or histocompatibility antigens. The eventual biochemical elucidation of these substances will provide ways of inducing specific tolerance.

Finally, since specific tolerance is more easily established between individuals of close genetic relationship, the importance of histocompatibility testing or tissue typing of individuals is emphasized and discussed extensively.

The future of tissue transplantation for widespread clinical application rests on the solution of the problems posed by the specific subjects mentioned above. Allied with these is the parallel problem of organ preservation and availability, once the complex immunological mechanisms are understood and brought under control.

Dr. Paul S. Russell is Chief of the General Surgical Services, MGH, and John Homans Professor of Surgery, HMS. Dr. Anthony P. Monaco finished his surgical residency in 1963 and now is Assistant in Surgery, MGH, and Instructor in Surgery, HMS.



First bookplate used in MGH Medical Library, from 1852 to 1858, when the Library was renamed in honor of its benefactor, Dr. John G. Treadwell. Referred to in old records as the "Billing's design."

The John G. Treadwell Award was established by the Board of Trustees on September 26, 1958, on recommendation of the Treadwell Library Committee, "to be given from time to time by the Hospital to an outstanding graduate of the Hospital's internship-residency program, the winner to be selected by the Trustees on the recommendation of the House Pupils Association and the General Executive Committee."

The first award was made in 1958, to Dr. Robert F. Loeb, Bard Professor of Medicine, Columbia University, who was a graduate of the MGH West Medical Service in 1920. The second award was given in 1961 to Dr. Joseph C. Aub, former director of the J. Collins Warren Laboratories of the Collis P. Huntington Memorial Hospital at MGH. Dr. Aub finished his East Medical residency in 1917.

The third Treadwell Award will be announced at Reunion Day next October 16.

By John J. Fields

Dr. Chester M. Jones

Advisory Committee Aids Students to Select Internships

At about this time of the year, third year students at Harvard Medical School start the complicated process of applying for their internship appointments, which will begin in July of the following year. In this phase of their medical career, they have the counsel of the INTERN ADVISORY COMMITTEE, set up at HMS to help each of its students select a number of hospitals to which they will apply for appointments. It takes extensive and intensive work for both committee members and the applicant to decide which appointments requiring his particular qualifications will offer him the type of postgraduate training he needs in planning his future professional career.

Sixteen HMS students of the Class of 1965 are among the 31 interns now beginning their internships at MGH. What they and their classmates did throughout the fourth academic year at HMS to secure their appointments was supervised by a member of the Advisory Committee and by Dr. Chester M. Jones, the committee chairman. Dr. Jones is a member of the Board of Honorary Physicians, MGH, and Clinical Professor of Medicine, Emeritus, HMS. He has been chairman of the committee since 1957, following his retirement from the active Faculty of HMS. Working with him on his committee are 22 members of the staffs of the Harvard teaching hospitals.

Each committee member is assigned five or six students with whom he talks at least twice during the summer months. Dr. Jones himself meets with nearly every student of the graduating class during the early summer and fall, and he may have additional talks with many who have very specific problems. In addition Dr. Jones works with Dr. Joseph Gardella, Associate Dean for Student Affairs.

In his office during an interview for *The NEWS,* Dr. Jones discussed his contact with the students. He pointed to the left arm of a wing chair facing him, and explained that the succession of young men with whom he has talked have a tendency to be slightly tense early in the interview, and they appear to channel much of this tension into their left arm, which in turn applies pressure to the chair's left arm — now badly worn. They are right to place so much importance on these interviews, for these are intended to help both the applicant and the committee clarify goals if necessary, and evaluate capabilities. This is essential in order to submit a recommendation to the Chairman accurately describing the applicant.

Letters of recommendation are carefully considered and worked over. Dr. Jones writes a tentative letter following his first interview with a student, making comments for his own use and noting where the applicant would like to go. In his official capacity as Special Consultant to the Dean of the HMS Faculty of Medicine, Dr. Jones writes all the final letters of recommendation. These, along with the applications, must be given to the Dean's office at the end of November, to be distributed to the department heads of the various hospitals to which the student is applying. He usually gets advice as to what institutions to visit for interviews before sending his final applications. Since this can involve expense as well as loss of time at school, he may need advice on how to plan or to limit his visits.

When the consultations with committee advisors and with Dr. Jones have resulted in the final recommendation and choices of hospitals, it remains only for the students to wait for the announcement of appointments from the National Matching Plan Program in Evanston, Illinois. Through this program, student choices have been matched with hospital intern committee preferential choices. In March the students learn the results of this matching.

Harvard has been a forerunner in this program of careful advising of medical students, made increasingly desirable with the growing competition for choice internship appointments. An invaluable asset to this advisory committee is one whose own career as a prominent figure in American medicine has brought him into contact with hospital physicians and medical faculties throughout the country. Such a man is Dr. Jones. His colleagues have paid him many honors. These include election to presidencies in the American Gastro-Enterological Association, the American Clinical and Climatological Association, and the American College of Physicians. He was Chairman of the American Board of Internal Medicine and was recently made an honorary member of the Royal Canadian College of Physicians.

An Honorary Mastership from the ACP was awarded to Dr. Jones in 1958 with the citation for "professional attainments and the force of his example to younger men in the art of medicine." As an advisor to future interns, Dr. Jones continues to prove the validity of this award.

G.T.

A story about the new interns as they begin their careers at the MGH is planned for the next issue of The NEWS of MGH.

Service League

The officers of the Service League for the year 1965-1966 are: President, Mrs. Benjamin Castleman (succeeding Mrs. Claude Welch); President-Elect, Mrs. Farahe Maloof; Vice President, Mrs. Laurence Robbins; Recording Secretary, Mrs. Marshall Bartlett; Corresponding Secretary, Mrs. Daniel Ellis; and Treasurer, Mrs. Lawrence Martin.

During the 12-month period preceding the annual meeting on May 11, the Reception Center of the League welcomed 114 professional visitors from 36 countries, and helped 97 of them to find living quarters in the Greater Boston area.

Dr. Perry J. Culver, a member of the Medical Service, MGH, and Assistant Dean for Admission, HMS, spent the month of June in Iran, where he had been invited by the University of Pahlavi in Shiraz to serve as a consultant on internal medicine and medical education. In Shiraz, one of the world's most ancient cities, he lectured on problems of modern medicine. He also visited with Dr. Farrokh Saidi, Professor of Surgery at the Saadi Hospital, and an MGH surgical alumnus (1960).

The Mission of Dr. Sumner Jackson

The full story of Dr. Sumner Jackson, an MGH surgical alumnus who became Chief of Staff of the American Hospital of Paris, has never before been told, although fragmentary reports of his tragic death in the sinking of a Nazi prison ship in 1945 appeared in American newspapers shortly after the surrender of Germany. The following is a condensation of a memorial to Dr. Jackson written recently by his close associate, Dr. Morris B. Sanders, also an MGH surgical alumnus. —Ed.

SUMNER WALDRON JACKSON, a native of Maine, was graduated from Bowdoin College in 1909 and from Jefferson Medical College, Philadelphia, in 1914. He was an East Surgical house pupil at MGH from November 1914 until July 1916.

In World War I he served with the Harvard Medical Unit in France, with American Red Cross Hospital No. 2, and subsequently in the U. S. Medical Corps, being honorably discharged as a captain in 1919. He married Mlle. Charlotte Barrelet, a nurse, in 1917.

After serving as an assistant to a Philadelphia urologist for two years, he returned to Paris and joined the staff of the American Hospital of Paris as a urologist. This institution had been incorporated in France in 1906 and in the United States by a Congressional Act of 1913. It was opened on March 30, 1910. The present building, with a capacity of 160 beds, was erected in 1926.

The American Hospital was serving as a veritable medical home for Americans residing or touring in France. Its doctors and nurses spoke English, and American medical customs were employed. It was literally a showcase of American medicine. It was helping to win European confidence in American physicians and surgeons at a time when the flood tide of medical postgraduate students was beginning to turn from east to west.

One member of its nursing staff was Elisabeth Ravinna, a graduate of the MGH School of Nursing (1922), who became chief operating room nurse. She died in 1962.

When the war clouds of 1939 became menacing, the American Hospital volunteered its services to the French army, and thus it became a French Auxiliary War Hospital. On June 1, 1940, with the approach of the German armies toward Paris, Dr. Jackson moved from his house at 11 Avenue Foch into the hospital. Upon the death of Dr. Thierry de Martel, Chief of Staff, just as the Germans were streaming into the city, Dr. Jackson took his place.

The Germans permitted Dr. Jackson to set up a dressing station for the French wounded at Fontainbleau and to evacuate selected patients to the American Hospital. Dr. Edmund Gros, former chief physician of the staff (who in World War I had been "spark plug" of the Lafayette Escadrille), and Dr. Morris Sanders rode on the first sortie of the American Hospital ambulance to Fontainbleau.

Dr. Sumner Jackson

The details of Dr. Jackson's association with the French Resistance are not fully known. Suffice it to say that his house was utilized as a shelter and stepping stone for fallen Allied aviators who had evaded capture and were attempting to return to England.

Dr. and Mrs. Jackson and their 16-year-old son Phillip were arrested on May 24, 1944. Eventually Dr. Jackson and Phillip were interned at the extermination camp of Hamburg-Neuegamme, and Mrs. Jackson was sent to the camp of Ravensbruck.

The American Hospital of Paris. (Photo by René-Jacques, Paris)

A fellow prisoner at Neuengamme was Michel Hollard, the French Resistant whose discovery and detailed description of the Nazi V-1 bomb launching sites in northern France, all pointing toward London, had enabled the Royal Air Force to eliminate those sites. The following is quoted from a book by George Martelli entitled *Michel Hollard: The Man Who Saved London.*

"Hollard's circle of acquaintances in Neuengamme was completed by a remarkable American called Jackson. . . . Jackson arrived in the camp after Hollard, accompanied by his 16 year old son, Phillip. Nobody knew why they had been deported and Jackson never talked about it.

"A man of 60, very upright, with white hair, strong features, and a stern, almost hard expression, he appeared as a person of great energy and forcible character. He was extremely reserved in manner, and this and the dignity with which he supported the camp life immediately aroused the sympathy of Hollard, with whom he soon established a tacit understanding."

On the approach of the British army in April 1945, many prisoners of Neuengamme were sent to Lübeck on the Baltic Sea and herded on three prison ships. The Jacksons were on the 6000 ton cargo ship *Thielbeck.* When the ships were moving out into the bay, RAF planes spotted them and ordered them to put back to shore. One ship turned back, but the other two, including the *Thielbeck,* refused to obey the order and were sunk. Dr. Jackson was drowned, but Phillip swam to shore.

Phillip came under the protection of the British, whom he served as an interpreter. In July 1945 he was reunited with his mother in their Paris home.

Dr. Jackson had been awarded the *Croix de Guerre avec Palme* by the Free French in October 1940. On November 20, 1946, the Board of Governors of the American Hospital passed a resolution honoring Dr. Jackson. The French National Commission of Homologation approved a posthumous appointment of Dr. Jackson as captain in the French army (*Mort pour La France*). Field Marshall B. L. Montgomery signed a British Certificate of Service in recognition of Dr. Jackson's heroism. From his native country Dr. Jackson received posthumously the Medal of Freedom.

These honors, wrote Dr. Sanders in his memorial to Dr. Jackson, "attest once more that the basic lessons of medical practice — professional and ethical — learned as an intern at the MGH serve to produce a corps of physicians and surgeons to go out into the world to serve God, humanity, and one's particular country and profession, far beyond the call of duty."

The Mission of Dr. Morris Sanders

Dr. Morris B. Sanders (HMS 1919; MGH East Surgical Service 1920) was first a surgical resident in China at the Yale-in-China Medical School and Hospital (1921 - 1923). Then he was a member of the MGH Urology Service (1927-1931). After several months' service as an assistant to Dr. Alan Gregg in the Fellowship Program of the Rockefeller Foundation, he sought the post of resident surgeon at the American Hospital of Paris to better acquaint himself with French medical needs. This resulted in the personal attempt, by example and precept, to help modernize French anesthesia and to encourage further training of French anesthetists in their own country.

This work was carried on until 1947 at the American Hospital, at *L'Hôpital Laennec,* and at a Red Cross hospital *(Place des Peupliers).* In this endeavor, he was associated with the Drs. Du Bouchet and Jackson at the American Hospital, and with such French medical leaders as Lardennois, de Martel, LeMee, Banzet, Iseln, and others.

Dr. Sanders was interned for four months in the Nazi concentration camp at Compiègne, being released through the efforts of Dr. Alexis Carrel, the well known medical scientist who was organizer and director of the French Foundation for the Study of Human Problems. Dr. Sanders had been a member of the Commission for Oxygen Therapy of the French Armies, of which Carrel was the chairman (1939-1940). On release from imprisonment, Dr. Sanders became a consultant to the French Foundation.

In 1948 Dr. Sanders was appointed the first U. S. Public Health Attaché for France in Paris, and later for the Middle East States of Lebanon and Syria in Beirut.

In 1951 he retired to Rockport, Mass., where he has continued his studies on the Science of Man. He began these studies during the Nazi occupation in the French Foundation, together with Prof. Serge Tchakhotine, a former associate of Pavlov (of conditioned reflex fame). Sanders and Tchakhotine had first met in the concentration camp at Compiègne. Dr. Sanders is also engaged in biographical and historical studies.

Ether Day and Reunion Day

Ether Day, October 16, 1965, will be a notable date in MGH chronology. The Ether Dome of the Bulfinch Building will be dedicated as a National Historic Site, the Harold Whitworth Pierce Cardiopulmonary Research Laboratories will be dedicated, and the House Pupils Alumni Association will hold its first Reunion Day since 1961, at which the recipient of the third John G. Treadwell Award will be announced.

Dr. Henry H. Faxon (East Surgical Service, 1927) is chairman of the committee on arrangements for Reunion Day. Dr. Langdon Parsons (West Surgical Service, 1929), president of the Alumni Association, will open the business meetng at 10 am in the Moseley Auditorium. After the announcement of the Treadwell Award, Dr. Robert H. Ebert will lead a discussion of current work and future plans of the Pierce Cardiopulmonary Research Laboratories, the dedication of which will begin at 12:30 pm. (Dr. Ebert, formerly principal investigator on the cardiopulmonary project, began his duties as Dean of the Harvard Medical School on July 1, 1965.)

Dr. Parsons will preside over the luncheon, which will begin at 1 pm. Dr. John H. Knowles, General Director, and Dr. Paul S. Russell, Chief of the General Surgical Services, will discuss the planning for future MGH development, mainly in connection with the new Surgical and Special Services Building. Dr. Oliver Cope will describe the future program of the Shriners Burns Institute, of which he is Chief of Staff.

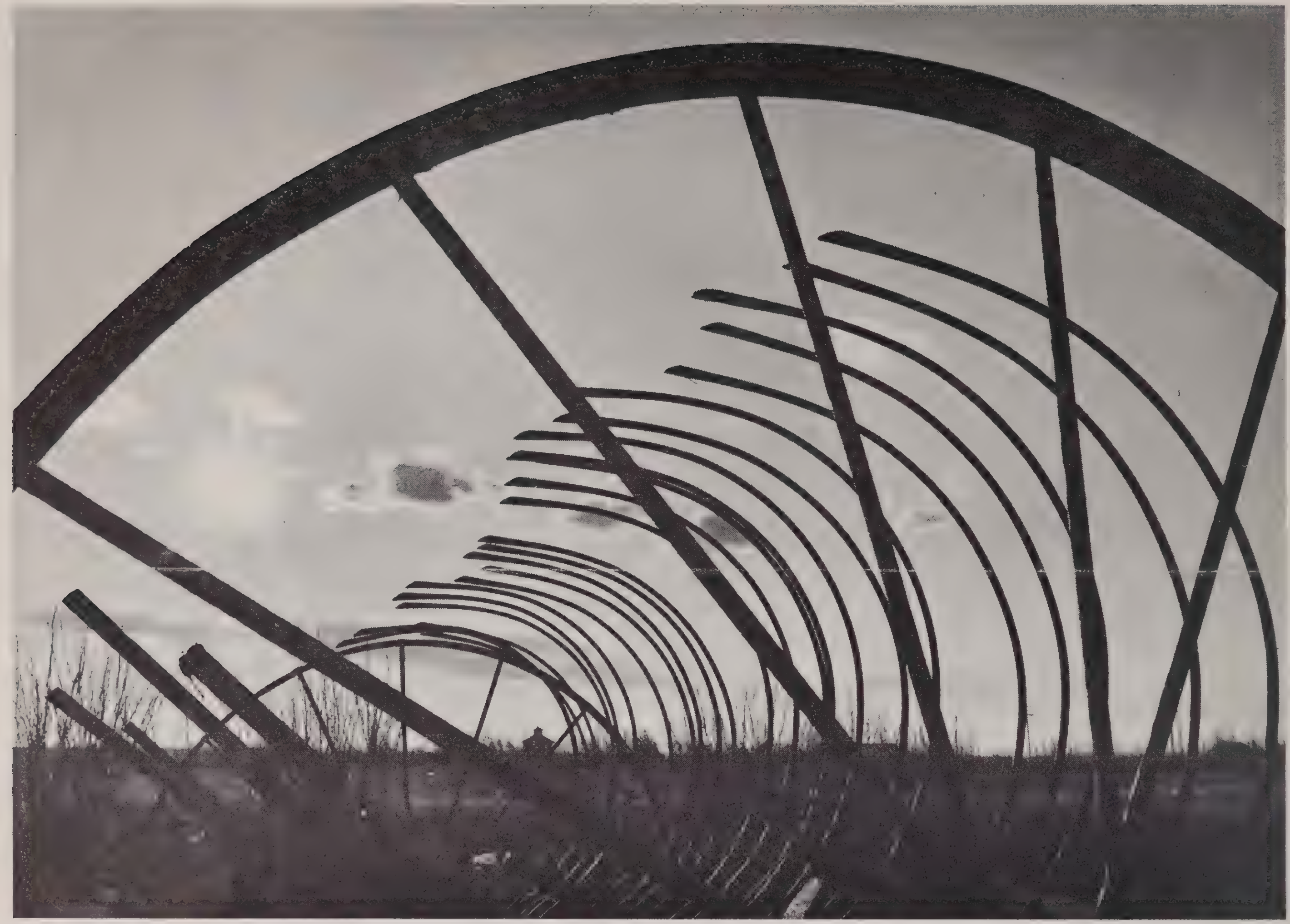
The second session in the Moseley Auditorium will begin at 2:30 pm.

The program in the Ether Dome will begin at 4 pm. Dr. Henry K. Beecher, Chief of the Anesthesia Service, will discuss current advances in the control of pain, as well as the historical significance of the first operation under ether anesthesia in the Ether Dome on October 16, 1846. A plaque designating the Dome as a National Historical Site of scientific interest, certified by the National Park Service, will be unveiled.

A reception and dinner dance for the members of the Alumni Association and their guests will be held at the Harvard Club, beginning at 7 pm.

All alumni will be sent formal invitations early in September, but Dr. Parsons urges all to reserve October 16 now on their appointment schedules for Reunion Day at the MGH.

The first regular observance of Ether Day was held on October 16, 1903. The first meeting and dinner of the House Pupils Alumni Association was held on March 24, 1906 at Hotel Vendome in Boston. In later years Reunion Day coincided with Ether Day.



The Photographer's Point of View

Above is reproduced an outstanding print from a recent MGH exhibition of photographs by John J. Fields, who submits the following statement of his views on photographic art:

Ideally, an art exhibit's initial visual impact arrests and stimulates our senses. Upon that foundation effective use of design, composition, size, and media is applied. However, far and above the technical is the artist's choice of subject and concept, for it is there one's individuality of inner expression is exposed once his technique is applied.

In my recent exhibition I selected each print for its singular qualities, but maintained a subtle uniting theme depicting Past, Present, and the continuous movement of Life toward the future. I use the word movement in this instance in its more universal and profound sense.

Illustrated is a hayrake that had been abandoned in the remotest corner of a field. In itself, one could exploit the simplicity of design and texture of its various parts, but my approach was to do more. I wished to record and portray a preconceived mood. Walking around the hayrake I saw that by using a wide-angle lens and shooting from a low angle, through the wheels, I could induce a strong design, and relate the hayrake to the environment by careful framing of the farmhouse. Total visual effectiveness was achieved by shooting directly into the sun, silhouetting the entire scene, thus producing subdued detail in the subjects while emphasizing design, composition, and — above all — the preconceived mood.

From an initial feeling evolves a mental concept that governs the techniques applied toward creating the desired end result. What's more, feelings must be evoked in the viewer, for this is the criterion of fine art.

Toulouse-Lautrec was quoted as saying, "Were I not an Artist, I should like to be a Surgeon." What better analogy could be drawn of precise control of technique. There is not room for compromise.

John J. Fields

The Advent of Centrex

Centrex, a new advance in the field of telecommunications, will soon replace the 8-position manual switchboard (PBX) which since 1939 has been located on the top floor of the White Memorial Building. The final signature was affixed on June 7 to an agreement between the Hospital and the New England Telephone Company. The switchover will be made at 2 AM on Sunday, November 28, 1965, according to Miss Evelyn Dunn, Coordinator of Communications at MGH.

Centrex permits dialing of calls from outside MGH directly to the wanted extension without going through PBX. The system, in addition to being faster, reduces the possibility for error. Centrex is already in operation in other large institutions such as the Johns Hopkins Hospital and the Columbia-Presbyterian Medical Center. On the basis of their experience, it is expected that more than 80% of the 10,000 calls received daily at MGH will be dialed through Centrex.

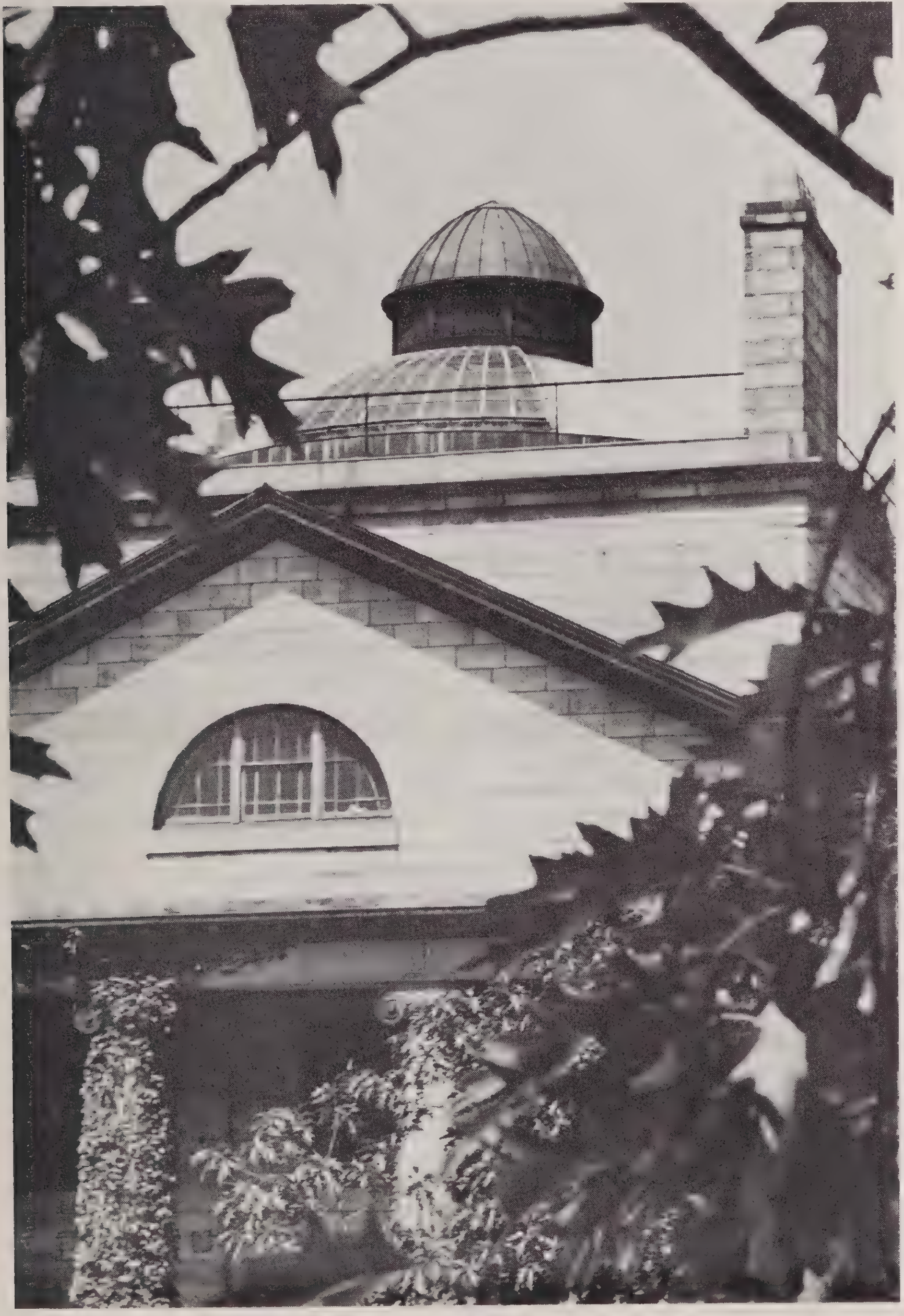
The NEWS of MGH

Vol. 24, No. 6 Boston, Massachusetts September-October 1965

Ether Dome: A National Historic Site

Earlier this year the Department of the Interior designated the Ether Dome of MGH a National Historic Site of scientific interest, as recommended by the National Park Service. A plaque will be presented to the Hospital on Ether Day, October 16.

Photo by John J. Fields



If the MGH alumni were asked to select an official symbol for this institution, their choice might well be the Bulfinch Building front, or simply the central portico and dome. A representation of this facade appears on or near the title page of every edition of the published histories of MGH.

The Ether Dome is more than the crowning structural feature of the first building of this hospital. It was originally designed in 1817 by the great Charles Bulfinch as a surgical amphitheater, at a time when operations were performed by skylight augmented by oil lamps. He left Boston late that year to become Architect of the National Capitol in Washington; but Alexander Parris, his successor at MGH, executed the original Bulfinch design in superb fashion.

On October 16, 1846, the amphitheater was the scene of the greatest moment in the history of surgery. Every newcomer to MGH soon hears the familiar story of the first public demonstration of ether anesthesia by Dr. Morton, dentist, and Dr. Warren, surgeon.

About 8,000 operations were done in this chamber between 1821 and 1868, when a separate building was erected for surgery. Then the dome acquired new functions successively: a storage area until 1873, a dormitory for female servants until 1889, a dining room for nurses until 1892, and finally a teaching amphitheater down to the present.

All alumni and guests here on Ether Day are welcome to inspect the Dome, which was recently refurbished under the supervision of Dr. Ellsworth T. Neumann, Administrator, and Mr. Paul Lancaster, consultant on interior decoration.

Reunion Day

All is in readiness for the Reunion Day of the MGH House Pupils Alumni Association, which coincides with Ether Day. Those who need last-minute reservations for the luncheon or the dinner dance should contact the office of Mr. David C. Crockett on Moseley I (tel. 882) or Mr. William Washburn (tel. 884).

Dr. Lindemann Retires

Transition in Psychiatry

The leadership of the Psychiatric Service changed hands on October 1, 1965. Dr. John Nemiah became Acting Chief and Dr. Lindemann retired to assume a professorship in Social Psychiatry at Stanford University.

Dr. Nemiah has been central to the psychiatric program for more than a decade and is well known throughout the Hospital as a superb clinician and teacher. He has taught generations of medical students in the second year course and has provided students with one of the most useful textbooks in psychopathology. His clinical and scientific concerns relate to psychodynamic and psychosomatic problems. He is continually aware of the secure foundations which behavioral studies must have in neurology.

Dr. Nemiah takes over at a time of rapid expansion of services and, indeed, of some revolutionary changes in psychiatric concepts and practices. The departing Chief of Service received from Dr. Stanley Cobb a challenge of facilitating the growth and integration of our system at MGH, dealing with the neuroses and psychosomatic disorders. He undertook to expand the range of activities of the Psychiatric Service to include general hospital care of many psychoses, the establishment of the Stanley Cobb Laboratories for Biological Research in Psychiatry and, most central to his interests, the evolution of a set of community services hopefully leading to a foundation for the emerging field of preventive psychiatry.

It will remain for history to judge success and failure in this enterprise. At present, we are aware of much ferment and controversy, a variety of opinions in which enthusiastic support contrasts with equally emphatic rejection. Many changes in practice originated in a re-definition of the target of psychiatric care. The traditional concept of disease as a set of pathological processes within an individual has been replaced by a concept of psychiatric concern focused on interpersonal disturbances involving several persons, of whom one person, often accidentally, is considered as "the patient." The social system, the relative involvement of its members in shared social pathology, and both the pathogenic and remedial processes within the social order became essential ingredients in diagnosis and treatment. Psychosocial crises such as bereavement, social conflict, and disaster affecting a cluster of individuals in complementary ways, had to be studied as a possible source of well-adaptive and maladaptive responses. The resources of the community in dealing with such crises, the roles played by the various professions in anticipating and coping with such crises, and the particular role of the physician had to be clarified and studied with a view to possible reorganization.

As a consequence of this orientation an attempt was made to develop psychiatric agencies belonging to the Hospital administratively and integrated with intramural activities of the Service, but functioning in the outside community. Two centers for research and preventive intervention were created: one in a suburb, Wellesley, and one in a central region of Boston, the West End, during a program of urban renewal. Their purpose was to review significant community practices, prevailing culture patterns, definitions of health and sickness, and resources for coping with crisis situations. Close relationships had to be developed with the educational, welfare, political, religious and legal agencies in the community in order to align medical approaches with their respective ways of helping individuals and families.

This new orientation also brought about a new emphasis on consultation work outside the psychiatric ward, involving not only those medical, surgical and specialty cases which were suspected of psychiatric illness but even more the psychosocial disturbances which brought them to the hospital and which caused dismay and perplexity among the caretaking personnel within the hospital: considerations which became crucial for the problems of after-care and the continuity of emotional support in subsequent crises. Social scientists became actively engaged with psychiatrists in studying social and cultural aspects of the patient flow through the psychiatric clinic, the emergency ward, and the medical clinic, and the demand for consultative service in various regions of the Hospital increased. Although the Service has enlarged its staff it is difficult to keep up with demands for consultation. We have been more successful with the low income population in the general wards than with private patients, where in some cases not only the acceptance of psychiatric consultation, but often also the definition of the problem as a psychosocial crisis is still controversial.

This increased internal demand was paralleled by many more requests for consultation from the outside *community* and for staff participation in the development of the nationwide program of community mental health centers. A recent example of staff use in this manner was the appointment of Dr. Lindemann as Chairman of the Metropolitan Committee for Mental Health Planning, jointly sponsored by the State Department of Mental Health, the Massachusetts Mental Health Association, and the United Community Services.

Dr. Erich Lindemann

To insure an orderly integration of this new activity with the biomedical sciences, great care had to be taken that these innovations and reorganization did not lead to diffuse thinking and imprecise methods. The language of the social sciences is still alien to the medical profession. Their problem-solving approaches are unfamiliar, and their methods of reaching scientific consensus differ from those of the biological sciences. A new set of behavioral science laboratories was needed. In these laboratories also we use the crisis concept and tackle problems of adaptive behavior as a central theme, building on the experimental approaches developed by Dr. Cobb.

These emerged as the Stanley Cobb Laboratories for Psychiatric Research. They provide the Service with facilities for basic biological research into behavioral phenomena. In addition, they facilitate the education of medical students and residents, and provide advanced work for individuals already trained in laboratory fields pertinent to the understanding of behavior. In the four years since opening the laboratories, our total annual research support has increased from $144,000 to $600,000. Three of our four senior staff members hold NIMH Career Research Awards. These four are supplemented by two psychologists several years postdoctoral, who carry on their own programs of investigation. In addition there are with us seven individuals of postdoctoral status who stay for one or two year periods.

The laboratories are divided into four major investigation areas: biochemistry; (human) experimental psychology, with a major focus on cognitive processes; human physiology, emphasizing autonomic and endocrine concomitants of behavior; and (animal) neurophysiology. A laboratory area for animal operant conditioning has been developed, as well as a computer facility and a laboratory for developmental anatomy. Each of the senior investigators is relatively autonomous, and individual laboratory programs are independent. However, many collaborative projects have developed. In addition, each laboratory has developed important programs in conjunction with other services in the Hospital, notably neurology, neurosurgery, and medicine, and for special purposes with research departments outside the hospital.

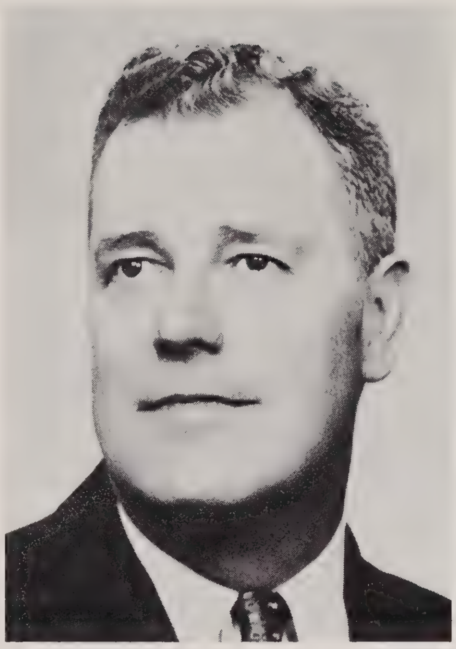
A shared philosophy of the laboratories is an emphasis on hypothesis-oriented research directed at behavioral phenomena which can be operationally defined with reasonable rigor. The majority of investigations to date have focused on neurophysiological and biochemical processes underlying basic psychological functions such as memory, perception, learning, and attention, in health and disease. We must discover the precise manner in which the central nervous system operates to cope with stressful and challenging situations. The storage and proper utilization of information, the adequate anticipation and rehearsal of future situations, and the development of suitable coping mechanisms can now be scrutinized in the laboratory.

The laboratory has developed an extensive training program. Medical students spend three to twelve months in laboratory research with us. Other predoctoral students from MIT, Brandeis University, Harvard University and Boston University have sought out the laboratory for training. They have prepared theses in biology, psychology, electrical engineering and physics. Three of these have been Ph.D. candidates. This wide spectrum of academic identities enriched not only the students' experience but our own perspective. Three formal seminars have been sponsored. One is a teaching session aimed at acquainting residents with research methodology and current investigative findings pertinent to their primarily clinical interests.

Two tutorial courses for Harvard Medical School are given by staff members: one in computer applications to medicine, one in neuropsychiatry research methods. A course in problems of alcoholism is taught in the laboratories to professional workers from the entire city. In addition to the regular Harvard Medical School course, from 60 to 90 students and professionals are involved in a continuing educational relationship with the Stanley Cobb Laboratories.

Fostering in this manner an inquiring mind with respect to both the social and the biological sciences, we can confidently undertake to train future clinicians. Our educational program over the last decade has developed into a three year program of basic studies

Continued on Page 5



The Rev. Russell L. Dicks

Pioneer Hospital Chaplain Dies

The Rev. Russell L. Dicks, pioneer in clinical pastoral care, died of a heart attack in Orlando, Florida, last March. In 1933 the Protestant Episcopal Council for Clinical Training, with the consent of the MGH Board of Trustees, appointed Dicks first chaplain to the Hospital and supervisor to theological students who were receiving instruction from Dr. Richard C. Cabot in the practical aspects of ministering to patients.

A year or so later Dicks initiated a summer class for practicing ministers. He left MGH in 1938, but the summer class was continued at MGH until in 1944 it developed into the Summer School of Pastoral Care — the first to be held under the auspices of the nationwide, nonsectarian Institute of Pastoral Care, Inc.

The following tribute was written by the Rev. Allan W. Reed, Protestant Chaplain and Supervisor of Clinical Pastoral Education at MGH.

A Tribute

The Rev. Russell L. Dicks found at the Massachusetts General Hospital the freedom and the inspiration for creative and pioneering work in the area of patient care.

The publication in 1936 of *The Art of Ministering to the Sick*, by Dicks and Dr. Richard C. Cabot, marked the beginning of a movement toward scientific and ordered study of the needs of patients, and of the techniques and personal qualities required of those doctors and clergy who attempt to minister unto patients. The collaboration of Cabot and Dick was to produce — years before the rest of medicine and theology could accept it — the beginning of the team approach to patients by doctor and chaplain.

Perhaps if Cabot and Dicks had not been such unique personalities, their contribution might have been worked into the fabric of hospital life a good deal earlier; but, if they had been less than what they were, they probably never would have asked the disturbing and rewarding questions that came out in their book.

Today, the Department of Medicine and Religion of the AMA, as well as various theological faculties, seem to be facing up to the implications of the great issues posed by Cabot and Dicks more than three decades ago, and recognizing that it is futile to treat just part of a person — whether that part be the "physical," "spiritual" or "mental" part.

After Dicks left MGH he served on the staff of the Presbyterian Hospital in Chicago, moved on to a large church in Dallas as a minister of pastoral care, returned to Chicago to the Wesley Memorial Hospital. Then he joined the faculty of the Divinity School of Duke University. At the time of his death he was conducting a pastoral counseling center which he had founded several years ago in Orlando, Florida.

The MGH continues to be part of the arena in which basic questions concerning the nature of man and God are being raised and fought out. Last August the MGH Summer School of Pastoral Care presented certificates to 13 ministers and seminary students who had spent 12 weeks here, working full-time at the task of ministering to patients and at the same time asking themselves what the meaning is of all that goes on here. More than a score of MGH staff members served as guest faculty members, but the students themselves acted as their own "teachers" — following the pattern laid down more than 30 years ago by Richard Cabot and Russell Dicks.

The Rev. Allan W. Reed

The NEWS of MGH

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Centrex

Equipment and cables are now being installed for Centrex, which on November 28 will replace the outmoded manual switchboard (PBX) on the top floor of the White Memorial Building. Centrex will permit dialing from points outside the Hospital *directly* to the internal line desired.

The new exchange number for MGH will be 726 (replacing 523). Internal lines will be completely reassigned in number blocks, ranging from 2000 through 4499. For example, the patient care services and departments will have 300 lines numbered 2800 through 3099.

After the conversion, 430 private and semiprivate rooms in the Phillips House and the Baker Memorial will each have a phone for the use of patients.

Further information will be released by Miss Ann Augliera, assistant to Miss Evelyn Dunn, MGH Coordinator of Communications.

Nurses' Commencement

The 90th Commencement of the MGH School of Nursing was held on September 10 in John Hancock Hall, a class of 104 being graduated into the ranks of more than 5,000 alumnae.

Mr. Francis C. Gray, MGH President and a Trustee, presided over the exercises and awarded the diplomas. The candidates were presented by Miss Ruth Sleeper, Director of the School and the Nursing Service. The Rev. Allan W. Reed, Hospital Chaplain, delivered the invocation. The Commencement Address was given by Professor Miriam M. Ritvo of the Boston University School of Education.

In another ceremony on September 9, 18 members of this graduating class received the degree of Associate in Science at Northeastern University. In 1962 the MGH School of Nursing had offered one section of the freshman class the opportunity to enroll in classes in basic sciences and English at Northeastern as part of the 3-year basic nursing program.

PHS Grant for Research Wing

The largest Public Health Service construction grant ever made to MGH — $2,210,900 (to be matched by Hospital funds) — was announced by the Administration last July 30. It makes possible the construction of 8 research floors above the previously announced floors in the east wing of the proposed Surgical and Special Services Building along Blossom Street, as shown in the adjoining architectural sketch by architects Rogers, Butler and Burgun.

The grant will also be used for the additional Cryobiology Laboratory on the second floor of the new building and the Infectious Disease Laboratory on the fourth floor.

When the new building is completed in 1968, MGH will have a total of 180,000 square feet of space devoted to research, which amounts to 14 per cent of total hospital space.

The additional research space in the east wing will be allocated among the following units: Gastrointestinal Research Laboratory (6th floor), Cardiorenal Laboratory (7th), Arthritis Research Laboratory and Carbohydrate Research Laboratory (8th), Developmental Biology Laboratory (9th), Orthopedic Research Laboratory and Physical Biochemistry Laboratory (10th), J. Collins Warren Laboratories of the Huntington Memorial Hospital for Cancer Research (11th and 12th), and the Biochemical Research Laboratory (13th).

This allocation not only relieves overcrowding in the older research areas but also brings together in physical proximity those medical and basic scientists whose activities fall under the designation of "fundamental biology." Rather than allocate the new space to *branches* of larger units, thereby splitting these units, it was considered wiser to relocate whole research groups within this single new area and to re-allocate the evacuated space to other research groups that similarly need to expand or to integrate subunits.

When the above-named research groups have been established in the new building, they will expand their teaching and training activities with an intramural program for promising young men from the clinical services and departments. The ultimate goal is the long awaited bridge between clinical medicine and basic biological sciences. That this goal can be realized is the firm belief of Dr. Jerome Gross, Chairman of the Committee on Research and a member of the General Executive Committee.

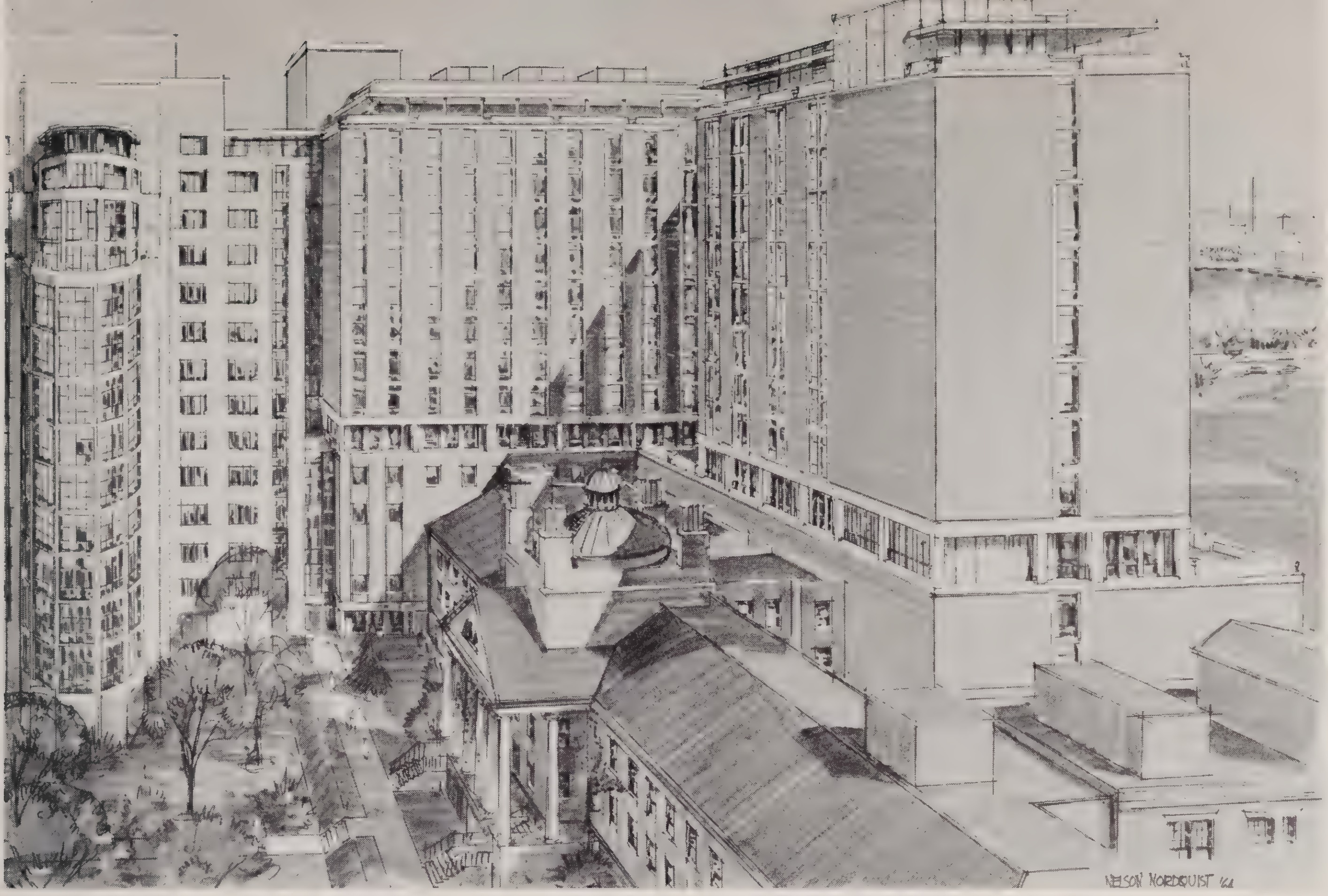
Dr. John H. Knowles stated in his 1964 annual report as General Director: "We have constantly reiterated the fully committed belief that the first function of any hospital is to take care of the sick and injured of the community and that in order to do this and give the best quality of care, this must be carried out in an environment of teaching and research. In such an environment of constant inquiry, high intellectual activity, repeated questioning of the conventional wisdom, constant scrutiny of established procedure, and the rigorous application of the scientific method, the quality of patient care has its best chance of being optimal."

Treadwell Library

Dr. Henry I. Bowditch, the Visiting Physician whom the MGH Trustees appointed first Librarian (1848), would have been amazed if he could have looked into the future and seen the 1964 report of the Librarian. Whereas he was in custody of a mere handful of books and periodicals, Miss Cole reported a total inventory of 10,732 volumes and 16,451 periodical volumes, and also a total of 36,336 reader visits in 1964.

Photocopying would undoubtedly have impressed Dr. Bowditch. In 1964 the Xerox copier in the Library produced 74,516 photocopies.

Miss Cole reported other progress: "Fluorescent lighting was installed in all of the stack areas in the Reading Room. . . . The new Reference Room adjacent to the Smoking Room was completed. . . . Since moving all of the abstract and index serials and reference books into the Reference Room left many empty spaces in the stacks, the entire book and journal collection was moved. This was, also, the logical time to weed the book collection and to rearrange it. . . . Potential users of the Library, exclusive of medical students, postgraduate course enrollees, and MGH student nurses, numbered more than 1,200 individuals."



Surgical and Special Services Building

Dr. Lindemann . . .

Continued from Page 3

followed by the advanced courses in either laboratory research, advanced psychotherapy, child psychiatry, or community psychiatry. Residents and Fellows now number 22 and the faculty has been enlarged accordingly.

Clinical services to our patients are emphasizing continuity of care from the Emergency Ward through Wards B7 or B8 to after-care in the Clinic and possible short-term readmission later. Occupational and recreational staff are involved not only in the regular ward activities but also in modified services such as "day care" only and "night care" only. An elaborate and complex network of relationships is maintained with social agencies throughout the metropolitan area. The MGH Department of Social Work is an important partner in the whole structure of in-patient care.

Close collaboration and, in many phases, integration have been developed with a greatly strengthened program at the McLean Hospital. This institution under Dr. Alfred Stanton's leadership has become again an outstanding center for prolonged psychotherapy and rehabilitation of severe mental illness. Like the MGH unit, it has developed a strong research base for its clinical and educational work.

An important unsolved problem is the provision of adequate facilities for private psychiatric patients. In many ways our Service is practicing "poor man's psychiatry." Many still believe that the McLean Hospital provides adequate resources for all private patients, including those with acute emotional disturbances. However, it is not being used by many physicians for their patients who have transitory emotional and social disturbances. The care for such patients at the MGH has to be provided now by Wards B7 and B8, neither of them being suited for private care. The Phillips House and the Baker Memorial Hospital are not equipped with a special area which provides suitable facilities for intensive care of the emotionally sick. In the absence of such an area we do not have a properly constituted psychiatric team to serve these patients. Once such a facility is available, there will no doubt be much wider use of psychiatric assistance, and there will be many more admissions to the Hospital of patients whose primary problem is of an emotional nature. We are also convinced that such a development would not reduce the number of patients requesting admission to the McLean Hospital. Quite the contrary, a portion of the patients admitted first to the MGH private psychiatric area would prove to be suitable cases for further care at the McLean Hospital, after the acute phase of the problem has been dealt with here.

Detailed plans have been worked out with the Commissioner of Mental Health, Dr. Harry Solomon, for the building of a new community mental health center in the Government Center building complex, a short distance from MGH. This unit would add very considerable strength to our endeavor in all phases of patient care, research, and teaching.

In a very special manner the new contributions of psychiatry as resource for the solution of problems involving social systems have brought us close to the central administration of the Hospital. Dr. John Knowles, with deep understanding and remarkable vigor, has accepted and elaborated our approach to social and emotional crises as relevant throughout the Hospital and in all phases of medical care. We are particularly grateful to him for his unwavering support.

In closing, I wish to express my profound appreciation to the Staff and to the residents of the Psychiatric Service, who have combined excellence

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A Letter From Bentong, Malaysia

The following letter was written to Dr. John H. Knowles, General Director, on May 29, 1965, by Dr. Ellen Dignan from the District Hospital of Bentong, state of Pahang, Federation of Malaysia.

Dear Dr. Knowles: Soon after finishing my work with Dr. Hermes Grillo as a Clinical and Research Fellow in Surgery, I left the United States to again return to Malaysia. . . . I am the first American who has been hired directly by the Malaysian government as a doctor. I am hoping that other Americans will be taken on a similar basis. . . .

When I first arrived I was posted to the town of Kuantan, the capital of the state of Pahang. . . . The hospital in Kuantan is an excellent one. . . . In spite of the serious lack of properly trained personnel, I have been very much impressed with the Health Ministry's over-all plans for development and expansion. . . . Even now the antituberculosis program is extremely advanced for a country such as Malaysia, and includes a fleet of mobile portable chest x-ray units, which actually does penetrate the rural areas. This fact might surprise Westerners because they tend to think of Southeast Asia as a tiger-filled jungle. . . . A few tigers still come into the small villages once in a while, but things are really not so primitive. . . .

In the first week of May [1965] I was transferred to the small town of Bentong, where I am to carry out the running of the 140 bed hospital together with a medical doctor from India. Fortunately the government has just completed a new operation theatre — even air-conditioned! Although we have no anesthetist (nurses are not allowed to give anesthesia in Malaysia), my colleague is capable of doubling as anesthetist, so that we can carry out fairly good surgery without too much risk to the patients. . . . I am beginning to carry out simple elective-type operations such as hernias, gall bladders, plastic procedures, etc. One problem is the convincing of the people in my district (95% Chinese) that elective operations are far safer than emergency ones. . . . I am carefully making certain that I never attempt any elective things that may not work. This attitude I realize is contrary to proper Western procedure, but I think on the long run it will bring more people to the hospital, which is the important thing.

Because of the tremendous outpatient load (the faithfuls!), the work in the hospital is much too much for only two doctors. . . . Right now I am unpopularly involved in the "eviction" of old male patients from a small building. They are not really sick but have no place to go — no relatives or friends. You know the story — nursing home candidates! However, to get these elder citizens to give up their hospital home is a formidable task. The Chinese, especially the rural ones, believe in respecting the wishes of the old people. . . . A few of the "rich" citizens have agreed to give money for the immediate support of the old men, should eviction ever really take place, but are betting that such an event will never take place. . . .

I need not go into a long list of things which are desperately needed for my hospital (drugs, instruments, even proper food). . . . However, I am determined to make the place as good a hospital as can be expected in Malaysia at this time . . . a place to which the people will be willing to come. This can be done only if they receive better and more successful treatment than the local Bomohs [witch doctors] can offer. . . . Many Bomoh medicines and even their surgical techniques work well. . . .

Unfortunately, working directly for the Federation has its drawbacks financially. In this respect I would be far more able to get the necessary equipment for my hospital if I were a member of the MEDICO, because the funds of that organization are almost unlimited when compared with the available funds from the Federation. . . . The government has redirected much of its public health and hospital appropriations into the Defence Fund because of the Indonesian confrontation. . . . Even part of my salary has been taken each month for the national defence fund because I am a government servant. Alone, I can do very little financially to help the hospital. This is why I am asking you to see if anything can be done. I plan to stay in Malaysia for at least five years, and I could see that any money contributed to my hospital would be used properly and wisely.

Sincerely yours,
Ellen Dignan, MD

Mr. David C. Crockett, Deputy to the General Director, has already written a letter containing fund-raising advice to Dr. Dignan. Perhaps other readers of The NEWS are in a position to aid her worthy mission. Her address is: District Hospital, Bentong, Pahang, Federation of Malaysia.

Dr. Dignan graduated from Tufts Medical School in 1958, served as intern and resident at Kings County Hospital in Brooklyn, and worked in Malaysia from July 1962 through May 1963. Concerning her subsequent 14-month fellowship at MGH, Dr. Grillo reports:

Dr. Dignan worked effectively and in-

Left to right: Drs. Carl F. Maraldi, Giorgio Rossitto, Paul D. White, George L. Nardi, Cesare G. Colletta. (Last man not identified.)

Rinnovamento Medico

A delegation from the Medical Society of Milan, Italy, headed by Professor Giorgio Rossitto of the University of Milan, visited MGH last August 20 and were favored with an all-day program conducted in the Bigelow Surgical Amphitheater and the Pierce Cardiopulmonary Research Laboratories. A buffet luncheon was served on the Kresge Plaza, where the above photograph was taken.

A welcoming address was given in Italian by Dr. Charles L. Clay, Assistant Director. Presentations were made by Dr. Paul D. White, Honorary Physician of MGH. The Milan Society bestowed honorary membership on these MGH doctors: Paul D. White, Walter Bauer (in memoriam), Gerardo M. Balboni, George L. Nardi, and Cesare G. Coletta.

The program included these speakers: Drs. George L. Nardi, Anthony P. Monaco, Charles E. Huggins, John F. Burke, and W. Gerald Austen, from the Surgical Services; Drs. Alfred Kranes, Richard A. Field, William E. Strole, Jr., Robert H. Schapiro, and Paul A. Kantrowitz, from the Medical Services; and Drs. Jack R. Dreyfuss and Robert A. Nebesar, from the Department of Radiology.

tensively on problems of tracheal resection and reconstruction. She made outstanding contributions to the development in the surgical laboratory of a wholly new method for replacement of the cervical trachea. Following completion of the laboratory work this method was applied with success in clinical practice. A report of this work accomplished with Dr. Tsuyoshi Miura of Tokyo University, who also worked in my laboratory, will appear soon in *SGO*. . . . Dr. Dignan faced a difficult decision at the end of her term, whether to continue her training in plastic surgery or return to Asia. She was very strongly motivated to contribute to medicine in less fortunate and underdeveloped areas. It was a very generous decision on her part.

The future progress of Dr. Dignan's hospital in Bentong will be noted from time to time in The NEWS.

A Letter from Conakry

The following excerpts come from a letter dated June 14, 1965, addressed to Dr. J. Gordon Scannell of MGH, written by Dr. Clement A. Hiebert, an MGH alumnus (Surgery, 1958), who had just completed a term of service on the S.S. HOPE *at Conakry, Republic of Guinea. Dr. Hiebert is on the staff of the Maine Medical Center in Portland, Maine.*

Dear Gordon: This letter is written on the eve of my departure from Conakry. . . . On the whole, things have gone along really quite well, and the clinics are perhaps only slightly less chaotic than when you were here . . . I shall always carry with me a magnificent memory of two doctors working and examining patients simultaneously in that little room, with the assorted interpreters around, the HOPE nurses periodically charging in and out with more patients destined for injections. . . . In the middle of one of these chaotic clinic episodes, Dr. Josepovich charged into the office and nonchalantly changed his clothes between the desks. . .

I am going down to Abidjan now. Except for an elephant hunt in Mamou, I have really not left Conakry other than for immunization trips into the interior. After Abidjan I am going down to Lagos, Ibadan, and then to spend a couple of days with Dr. Schweitzer. . . .

Dr. Accar very much appreciated your reprints, as did the other doctors. Joice Matteis and one of the other girls here translated the summary and conclusions in French. . . .

Sincerely,
Clem

To Dr. J. Howard Means

Wit-wag, watercolorist, physician, teacher, and glorious debunker, whose 80th birthday occurred June 24, 1965.

Oh friendly genes,
for Howard Means
you stacked the cards
you must admit.
His talents trace
such wide embrace
that Allah seems
aware of it.

His humor (dry)
his comment (wry)
are needed in
the world we share;
if only he
could statesman be
we'd spend far less
for world repair.

James Howard Means
recall your teens
and tell us how
you honed your skills
that we may teach
and somehow reach
the youth, alas
who'll bear our ills!

Francis W. Hatch

Chapel Concerts

The fourteenth season of the MGH Chapel Concerts, sponsored by the Service League for the enjoyment of patients, personnel, and visitors, will begin on Wednesday, October 20, with a piano recital by Miss Wendy Covell of Wakefield, a pupil of Minuetta Kessler.

These half-hour concerts are held on alternate Wednesdays from 3 to 3:30 PM until the month of May. The list of artists includes outstanding teachers and some of their gifted pupils, as well as choral groups, string ensembles, and even bell ringers — all of whom donate their services. The small budget of the Chapel Concert Committee covers only the cost of printing programs.

It was Mrs. Milford Schulz who gave initial impetus to these concerts in 1952; and it is Mrs. Schulz who is current chairman of the Committee, which includes about a score of League members and friends. Other chairmen have been Mrs. John Crawford, Mrs. Abraham Finesinger, and Mrs. Nathan Talbot.

Both ambulatory and wheelchair patients attending the concerts are escorted by members of the Committee. Mrs. Robert Joplin is in charge of scheduling this group. On some occasions more than a score in the audience have been wheelchair patients, but on the average there are 16 chair and 10 ambulatory patients in attendance.

There was music for patients in the Hospital prior to the advent of the Service League. The Ladies Visiting Committee had a long tradition of providing music for patients on appropriate holidays. Perhaps the most memorable concert ever heard at MGH was that given by the Boston Symphony Orchestra on the Bulfinch lawn in 1882.

The first of the Service League Chapel Concerts was given on November 11, 1952 by Mr. Homer Whitford, organist, and Director of Music at the McLean Hospital.

George Alley Exhibits

When photographer George Alley was hanging up prints for his exhibit in the Brick Corridor at MGH (July 26 - August 12), he commented that he had been "learning how to see." His crisp and revealing interpretations of everyday subjects in nature were exactly that — lessons in what may be termed creative perception. Mr. Alley had spent 35 years in "show business" before finding in photography his true calling. When not taking pictures he works as a psychiatric aide at the McLean Hospital.

Dr. Lindemann . . .

Continued from Page 5

and dedication in the pursuit of a psychiatric contribution worthy of this great hospital. My best wishes go to Drs. Nemiah and Stanton and all their fellow workers for much success in the years to come.

Erich Lindemann, MD
Retiring Chief of
Psychiatric Service

Dr. Lindemann was also Professor of Psychiatry at the Harvard Medical School.

Front row (kneeling): Dr. David Weisberger, Dental Medicine; Dr. William H. Sweet, Neurosurgery; Dr. Howard Ulfelder, Gynecology; Dr. Thomas B. Fitzpatrick, Dermatology; Dr. Raymond D. Adams, Neurology; Mr. Sidney R. Rabb, Trustee; Dr. Paul S. Russell, Surgery; Dr. John H. Knowles, General Director; Prof. Francis O. Schmitt, Trustee; Mr. Francis W. Hatch, Honorary Trustee.

Back row (standing): Mr. Henry C. Meadow, Associate Dean, HMS; Mr. Francis H. Burr, Trustee; Dr. Benjamin Castleman, Pathology; Dr. Robert H. Ebert, Medicine, now Dean, HMS; Mr. John E. Lawrence, Chairman of Trustees; Mr. Phillips Ketchum, Honorary President and Trustee; Dr. George P. Berry, Dean Emeritus, HMS; Mr. Francis C. Gray, President and Trustee; Mr. Henry R. Guild, Vice President, Treasurer and Trustee; Mr. Ralph Lowell, Trustee; Dr. Henry K. Beecher, Anesthesia; Dr. Laurence L. Robbins, Radiology; Mr. Edward L. Bigelow, Trustee; Dr. Ellsworth T. Neumann, Administrator; Mr. George S. Weld, Secretary and Assistant Treasurer; Dr. Nathan B. Talbot, Children's Service; Dr. Thornton Brown, Acting Chief of Orthopedics; Dr. Erich Lindemann, Psychiatry. (Photo by Peter F. Pierce)

Party for Dr. Ebert

The above photograph is notable in that it includes two Harvard deans together with most of the MGH trustees and service chiefs. In that respect the picture is unique.

The occasion was the farewell party held last June 7 at the Brookline home of Dr. John H. Knowles, General Director, in honor of Dr. Robert H. Ebert, who on July 1 relinquished his appointment as Chief of the Medical Services at MGH and succeeded Dr. George P. Berry as Dean of the Faculty of Medicine, HMS.

A Doctor at Work

The photograph on the right is the first of a series by John J. Fields illustrating the work of the Professional Staff, and focusing not on the glamorous and spectacular, but rather on those basic, essential, routine activities that daily add up to patient care, teaching, and research. In this picture Dr. Ronald S. Weinstein, Clinical and Research Fellow, and Acting Intern in Pathology, inspects a tumor specimen preparatory to microscopic examination.

By John J. Fields

The NEWS of MGH

Vol. 24, No. 7 Boston, Massachusetts November-December 1965

Alumni Witness MGH History in Process

Reunion Day at the MGH always brings together an illustrious representation of the American medical profession, and the atmosphere of the occasion is a blend of glorious history and destiny. On October 16, 1965, the MGH House Pupils Alumni Association witnessed the dedication of the Ether Dome as a National Historic Site, the conferral of the Treadwell Award on Dr. Edward Churchill, and the dedication of a new suite of laboratories for cardiopulmonary research.

Dr. Langdon Parsons, Director of Alumni Relations at the Harvard Medical School, quite appropriately presided over the business meeting of the Association in the Moseley Auditorium and also over the luncheon program in the general dining room.

Photo by John J. Fields

Dr. Edward D. Churchill, recipient of the 1965 John G. Treadwell Award (story on page 4).

The following were elected officers of the Association for the coming year: Dr. Howard Ulfelder, President; Dr. Sylvester Kelley, Vice-President; and Dr. Briant Decker, Secretary-Treasurer.

In the evening the Association and their wives, augmented by the current house staff and their wives, attended a reception and dinner dance at the Harvard Club.

The organizational success of Reunion Day can be attributed to Dr. Henry Faxon, chairman of the committee on arrangements, and his chief aides, Mr. David Crockett and Mr. William Washburn, both of the Office of Resources and Development.

Pierce Laboratories

There was good reason for the jubilation displayed by Dr. John Knowles and Dr. Robert Ebert in the photograph (page 3) taken in front of the Harold Whitworth Pierce Cardiopulmonary Research Laboratories on Reunion Day. Both men have made significant contributions to this field of research, both have served as chief of the Pulmonary Unit, and both now occupy key administrative positions. Today their successors have a magnificent new facility in which to carry on the investigative program that Drs. Knowles and Ebert had got under way.

At the luncheon meeting of the House Pupils Alumni Association, Dr. Knowles referred to the Pierce Laboratories:

"The Pierce Laboratories, which are being dedicated today, will be devoted to research in cardiopulmonary disease. Our clinical research in these areas has been outstanding over the years, with such people as Paul White, Edward Bland, Donald King, Edward Churchill, Helen Pittman. A new era of more basic approach to heart and lung disease has dawned, and biochemical and immunological techniques have now to be added to the older disciplines of clinical description and physiological measurement. I firmly believe that in

Continued on Page 2

Photo by John J. Fields

David C. Crockett (left) ponders a question propounded by Richard M. Nichols, manager of the Harold W. Pierce Charitable Trust, which contributed $200,000 toward the construction of the Pierce Laboratories.

Edgar Haber, Chief of the Cardiac Unit, and Frank Austen, Chief of the Pulmonary Unit, we have two of the most promising young men in American medicine today. Our future looks bright in these areas under their leadership."

Dr. Ebert served as chairman of the program held in the Moseley Auditorium, presenting the current work and planning in the Pierce Laboratories.

Pulmonary Unit

Dr. Frank Austen, Chief of the Pulmonary Unit, described the detection of hereditary angioneurotic edema by demonstration of a reduction in the second component of human complement:

"Hereditary angioneurotic edema is characterized by recurrent, acute, circumscribed and transient subepithelial edema of the skin, gastrointestinal mucosa, or mucosa of the upper respiratory tract. The localized edema of the skin is nonpitting and nonpruritic, and generally involves a portion of an extremity or the face. Concurrent or isolated involvement of the gastrointestinal tract, with nausea, vomiting or colic, may lead to diagnostic difficulties or surgical intervention, but serious consequences are rare. The life-threatening aspect of this disease is acute laryngeal edema, with asphyxiation. One hundred and fourteen of the 503 patients described as having hereditary angioneurotic edema have died of laryngeal obstruction, generally in the third decade of life.

"The inordinate mortality associated with laryngeal involvement, indicates the critical need to recognize hereditary angioneurotic edema without a family history involving several generations. Patients with hereditary angioneurotic edema are known to be deficient in a normal serum inhibitor of activated first component of human complement (C′1a esterase). The specific titration of second component of human complement (C′2), a natural substrate of C′1a, proved to be a reliable means of detecting patients with hereditary angioneurotic edema. The C′2 titer in 14 affected members of 5 different families was less than the lower limit of normal during asymptomatic periods and fell precipitously with attacks of peripheral, gastrointestinal or laryngeal edema. Three of the probands detected by the C′2 assay were not suspected of having hereditary angioneurotic edema, and even in retrospect the available clinical data do not yet permit this diagnosis."

Cardiac Unit

Dr. Edgar Haber, Chief of the Cardiac Unit, has furnished *The NEWS of MGH* this summary of the talks which he and two of his co-workers gave in the Moseley Auditorium:

"The research activities of the Cardiac Unit comprise a diversified attack on cardiac disease ranging from the study of individual patients, through a general investigation of the physiologic basis underlying cardiac disease, to a fundamental examination of disease processes at a molecular level. The three talks on Reunion Day are examples of research activity in which the Cardiac Unit engages. The first, by Dr. Roman DeSanctis, deals with a practical, everyday clinical problem. The observations and experiences which have led to this study are accumulated in the course of daily patient care and are of immediate interest and value in improving such patient care, as well as devising new means of treatment.

"The second presentation by Dr. Charles Sanders, who is in charge of the Cardiac Catheterization Laboratory of the Cardiac Unit, deals with a more fundamental kind of research, examining pressure and flow as determined during a procedure in which tubes are placed within the heart and great vessels. Such studies elucidate the intimate mechanism through which the various diseases of the heart take their effect, give new insight into the nature of the human circulation, and provide specific information which is useful in selecting patients for surgical procedures.

"In the third presentation, Dr. Haber details an application of recent discoveries in basic science to a pertinent clinical problem. The past 10 to 15 years have seen major advances in the solution of some of the fundamental problems of biology, such as the genetic code and the structure of protein molecules. We are now just beginning to see the fruits of some of this knowledge applied to the problem of disease, and one of the important functions of the Pierce Laboratories is a coordinated effort to apply such basic scientific information to analysis of the disease processes."

Surgical Cardiovascular Laboratory

Dr. W. Gerald Austen, Chief of this unit, reviewed the open-heart surgery carried out at MGH during the past decade. In 1956 only one patient underwent open-heart surgery here, but now approximately 200 open-heart operations are performed yearly. A remarkable movie film taken by Stanley Bennett of the Medical Photography Unit showed current operative techniques and valve replacement. Two of Dr. Austen's co-workers, Dr. Edward McLaughlin and Dr. Graeme Hammond, described their work in detail.

Dr. Knowles, in his alumni luncheon

Continued on Page 4

The NEWS of MGH

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Dr. Edgar Haber and Dr. Gerald Austen

All photographs by John J. Fields

PIERCE LABORATORIES

Dr. Robert Ebert and Dr. John Knowles

Open House in Pierce Laboratories

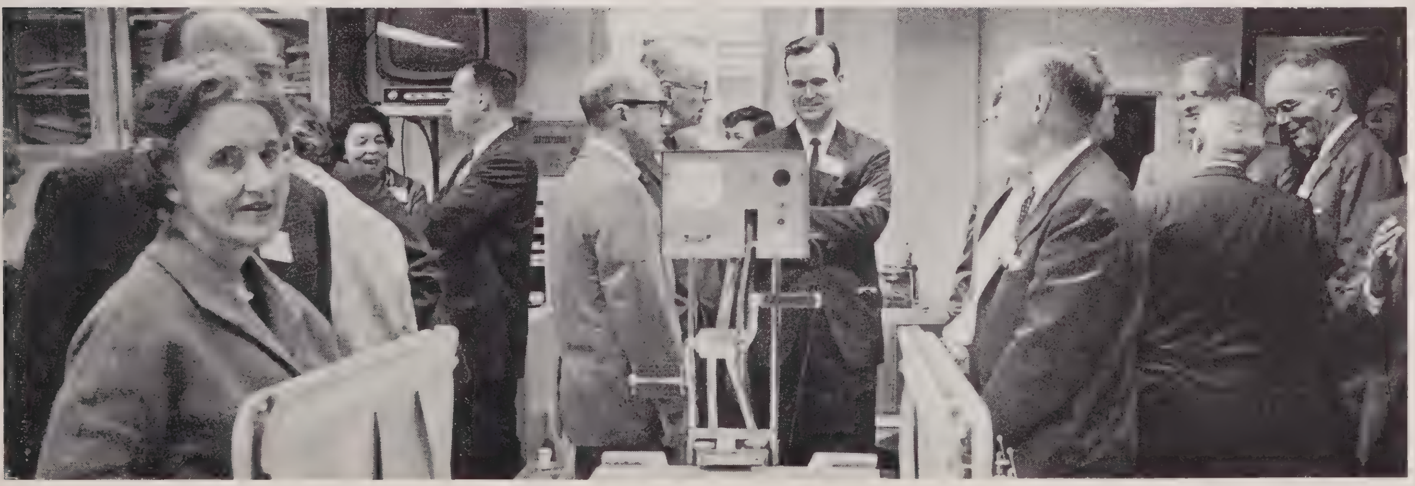

Photo by John J. Fields

Head table at the Alumni Luncheon. Left to right: Dr. Briant Decker, Dr. Henry Beecher, Dr. Henry Faxon, Mr. Richard Nichols, Dr. John Knowles, Dr. Edward Churchill, Dr. Langdon Parsons, Dr. Robert Ebert, Dr. Paul Russell, Mrs. Edward Churchill, and Dr. Oliver Cope.

Pierce Laboratories . . .

Continued from Page 2

address, referred to Dr. Gerald Austen as the youngest associate professor of surgery in the history of the Harvard Medical School, and added:

"Dr. Austen's contributions, added to those of Dr. Gordon Scannell, have already assured us of leadership in the acquisition of new knowledge and its rapid translation for the benefit of our patients afflicted with cardiovascular disease."

Other Work

Dr. Harriet Hardy described four cases of asbestos-related pulmonary disease and alerted the audience to the harmful biologic effects of this substance.

Dr. Homayoun Kazemi spoke of the application of cyclotron-produced gaseous isotopes and Xe-133 to pulmonary physiology.

The only ingredient lacking on Reunion Day was the cyclotron itself. This will soon be installed in the subbasement of the Pierce Laboratories under the supervision of Dr. Gordon Brownell, Director of the Physics Research Laboratory.

SSS Building

At the alumni luncheon program Dr. Paul Russell, Chief of the General Surgical Services, spoke of the 13-floor Surgical and Special Services Building, the construction of which is about to commence.

"This building, which will provide some 39,000 square feet on each floor, will bring together in a centralized fashion all of the operating facilities for the entire hospital complex for the first time in fifty years. Initially 24 new operating rooms will be completed on the third floor level, confluent with the existing facilities on the third floor of the White Building. The operating rooms have been planned with the utmost care to provide thoroughly modern accommodations for our increasingly complex and varied surgical procedures.

Dr. John Knowles (left) congratulates Dr. Edward Churchill, recipient of the John G. Treadwell Award.

"Supporting this area will be a suite of rooms for transient surgical patients where minor operations can be done on the floor immediately above. There will also be a 24-bed critical care unit to allow special care for such patients as cardiac, neurosurgical, orthopedic, and special pulmonary patients. Other special features of the building will include greatly modernized and centralized facilities for our chemistry and bacteriology laboratories, greatly needed space for radiology, a much better home for the blood bank, a new and expanded home for central supply, for the dietary department, and for our expanding accounting and admitting activities.

"Above the fourth floor level behind the Bulfinch Building on Blossom Street, will be a 9-floor block to house some of our research laboratories. Dr. Kalckar's Biochemistry Laboratory, Dr. Paul Zamecnik's Huntington Memorial Laboratories, the Lovett Laboratories, housing Drs. Gross, Kranes, Jeanloz and others, some of Dr. Glimcher's orthopedic research activities, the Gastrointestinal Unit under Dr. Isselbacher, the Renal Unit under Dr. Leaf, and physical chemistry with Dr. Young, are all to be relocated in this magnificent new research area, which will considerably exceed the total size of our present Research Building. We hope that this will allow eventual remodeling of the latter, now already called the "old" Research Building, to provide space for even newer oncoming efforts.

"I think it is easy to see why all of us here at the MGH are so tremendously excited and encouraged by this evidence of vigorous strength and why we are all so pleased at the opportunities which are offered to us of the present generation."

Treadwell Award

Unanimous approval of the choice of Dr. Edward D. Churchill (West Surgical Service, 1923) as recipient of the third John G. Treadwell Award was manifest at the alumni luncheon on Reunion Day. This award is given "to an outstanding graduate of the Hospital's internship-residency program."

Dr. Churchill's citation, presented by Dr. Langdon Parsons, read as follows:

"The long and impressive history of accomplishment by the Staff of the Massachusetts General Hospital acquired added lustre during your years as Chief of the General Surgical Services.

"Your thoughtful and imaginative application of physiological principles to the management of surgical problems revolutionized thoracic surgery and profoundly influenced the teaching of surgery in general. Much of the incredible explosion of medical knowledge from which we profit today was anticipated in your early attempts to bring the basic science laboratory closer to the operating theater.

"Your colleagues, residents, students, and war companions will always remember the inspiration you provided as surgeon, teacher, philosopher, and friend and will strive to follow the path you have so brilliantly illuminated."

The NEWS of MGH happily endorses this citation from the MGH House Pupils Alumni Association.

Shriners Burns Institute

Dr. Oliver Cope, Chief of Staff of the Shriners Burns Institute, spoke on the relationship of the Institute to the MGH at the alumni luncheon. His remarks will be published soon in *The NEWS of MGH,* but one paragraph is quoted here:

"The Shriners Orthopedic Hospitals are designed for the care of crippled children. In the case of the Institute, it was proposed by the Shrine to spend half the budget to care for burned children and half for research and teaching. It was these last two elements which necessitated that the Institute be built as a working part of a University teaching hospital and that it be staffed as any teaching hospital by an academic staff."

A pilot project interim operation has been conducted on the MGH Children's Service since April 1, 1964. Drs. John Burke, John Constable and John Crawford are chiefly responsible for the concepts being evolved, which Dr. Cope described as "new and exciting."

Ether Dome Dedicated

On Ether Day, the 16th of October 1965, the weather was clear and crisp — just as it had been on that momentous day exactly 119 years earlier, when Dr. William Morton had appeared at the gate east of the Bulfinch Building, bearing a mysterious flask and hastening to his appointment with destiny.

The outcome of his visit at the MGH that morning is known to every alumnus. As the alumni took their seats in the Ether Dome to witness its dedication as a National Historic Site, they could see the same flask reposing in a display case in one corner of the Dome.

This former surgical amphitheater had just been refurbished under the supervision of Dr. Ellsworth Neumann, Administrator, and his consultant on interior decoration, Mr. Paul Lancaster. They had been careful to preserve the original beauty of the arches designed for this room by Charles Bulfinch. Apollo and Pady-Hershef (the latter being the mummy from Thebes) observed the proceedings of the day in undisturbed dignity.

The main address of the occasion, delivered by Dr. Beecher, is presented in the adjoining columns. The unveiling of the plaque donated by the Department of the Interior was preceded by these remarks of Mr. Edwin W. Small, an official of the National Park Service:

"It is indeed an honor and a privilege to be here today and on behalf of the Hon. Stewart L. Udall, Secretary of the Interior, and George E. Hartzog, Jr., Director of the National Park Service, to present this certificate, and to witness the unveiling of the plaque, designating the Ether Dome in the Bulfinch Building of the Massachusetts General Hospital as a Registered National Historic Landmark.

"Both the certificate and the plaque specifically indicate that the Ether Dome 'possesses exceptional value in commemorating and illustrating the history of the United States of America.'

"In making additions to the Registry of National Historic Landmarks, it is seldom that we have the opportunity to reach into the fields of medicine and surgery, and to do honor to a landmark as significant in the benefits it has given to humanity generally as that which we are here to honor today.

"It was one hundred and nineteen years ago, or on October 16, 1846, that Dr. John C. Warren, in performing an operation for the removal of a tumor under the jaw of Gilbert Abbott, was able to put his patient to sleep under ether and to relieve him completely of any sensibility to pain.

"We are especially pleased today to do honor to the Ether Dome and to the memory of the participants in that experiment and operation which, through chemistry, opened new doors to the science and skills of surgery — to Dr. William T. G. Morton, the dentist who gave the ether to Gilbert Abbott, with his own apparatus, and to Dr. John C. Warren, the surgeon who performed the operation, phenomenally painless to the patient.

"With best wishes to the Massachusetts General Hospital, to the members of its staff, to its loyal alumni and friends, and with the prophecy that it will achieve other milestones as it has already done in the Ether Dome, I now take great pleasure in presenting this certificate designating the Ether Dome as a Registered National Historic Landmark."

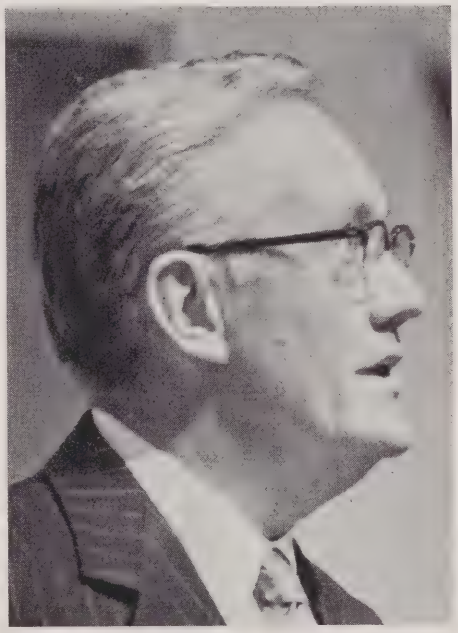

Photo by John J. Fields

Dr. Henry K. Beecher

Pain: One Mystery Solved

It is most fitting that the comments I have to make to you concerning pain are made in the Ether Dome, where 119 years ago the first public demonstration of anesthesia took place. Here the greatest single stride forward was made in relieving pain.

What I have to say to you will start out with a 16-year-old mystery, and end with its solution. Before presentation of these things I should like to give you a little background. To do this, I must take you back to the middle of the 19th century. It was then that two giants in medicine, Pasteur and Koch, believed that there was one cause for each disease. The problem was to find the microbe and its antagonist and all would be well, they thought. Even the powerful Virchow could not make his voice heard above the overwhelming authority of the two giants.

Virchow knew the situation was not as simple as Pasteur and Koch said. He believed that there were several components in the disease process. Notwithstanding Virchow's correct view, the prestige of Pasteur and Koch was so great that they led to what René Dubos has called the overestablishment of the doctrine of specificity of cause of disease. Everybody knows now that many factors must coalesce before overt disease appears. This is not only true for disease; it is also true for some of the symptoms of disease.

Take as an example, pain. In the decade prior to 1949 and for at least a decade after that time, literally scores of papers were written on experimental pain in man. Each author seemed to be bent on devising an ever more fiendish way of eliciting pain. Gradually the Hardy-Wolff-Goodell method took precedence over other methods involving electric shocks to teeth, pinpricks of the skin, tourniquet pain, pain produced by chemical agents in standardized technique, and so on. The Hardy-Wolff-Goodell method was based on the *first* perceptible pain produced by a measured amount of heat on the forehead. Beautiful dose-effect curves were published in which each increasing dose of morphine apparently had increasing power to relieve pain.

From 1947 to 1949 Dr. Jane Denton and I struggled with this method. We had no doubt that the method was sound, for many people had used it and said it was so. The trouble was, when

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we set up a properly designed experiment, using the double blind procedure, where neither subject nor investigator knew what had been given in a particular instance, where placebos were inserted (always as unknowns), and where mathematical validation of difference was required, then we found that we could not distinguish a large dose of morphine (15 mg) from a placebo (1 ml of normal saline).

Again and again we came up against this puzzling situation. Others got beautiful dose-effect curves. We could not distinguish even the extremes. Our inability to achieve the usual effect produced, as you can well imagine, a good deal of annoyance. What was the trouble with us? So we turned to an experienced investigator who had used the Hardy-Wolff-Goodell method successfully, he said, over a period of years. We found that as long as he *knew* what the patients had been given, he could reproduce these beautiful dose-effect curves, but when we deceived him, as we did, as to what the patients had received, he was no more able than we to distinguish between a large dose of morphine and an inert substance like saline.

To make a long story short, this startling observation of ours 16 years ago has now been confirmed by some 14 other groups, both in Europe and in this country. The curious fact was thus well established that experimentally contrived pain simply does not respond to morphine or other powerful analgesic agents, whereas pain of pathological origin always responds in greater or lesser degree to morphine.

On looking back through the literature we found that a philosopher named Marshall in 1894, and a psychologist named Strong in 1895 had produced a working hypothesis, so far as I can tell, based on no data at all. They said that a condition such as suffering has two components: the original sensation and then its psychological modification. Evidently morphine is powerless to block the original sensation. There isn't time now to recount the mass of data we have compiled to indicate that morphine and other powerful analgesics act on the reaction component. This appears, indeed, to be the site of action of strong narcotics like morphine.

At the same time one can interject the observation that experimentally contrived pain in animals *does* respond to morphine. Presumably, all pain is serious and significant to an animal, for the animal is unable to distinguish between pain of pathological origin and that experimentally produced. From this we get the tip that the significance of the wound seemed to be the important factor.

To bring this discussion down to the present time, it is a matter of some pride to me that we who had propounded the mystery that experimentally contrived pain does not respond even to large doses of morphine are now able to explain the matter. Coming down to the year 1964, Gene Smith, Lawrence Egbert, Robert Markowitz and I decided to tackle once again the problem of tourniquet pain. We had long held the view that possibly one difficulty with experimental pain methods is that the pain produced is usually sudden and fleeting — "pricks," "jabs," "stabs of pain" — whereas most clinical pain, aside from some of the colics, is usually much more sustained. As a matter of fact, it is difficult to control with drugs the pain aroused by sudden motion of a wound, or to control colicky pain. There was the suggestion in these observations that study of slowly developing and sustained pain has considerable interest for experimental purposes.

Our current method is based on tourniquet pain, which is accented by a brief period of exercises of the hand and arm below the tourniquet and then is followed by a rest period, when the individual focuses on his pain. We have categorized the pain produced at five levels: 1 = none, 2 = slight, 3 = moderately distressing, 4 = very distressing, and 5 = unbearable. The pain increases progressively after cessation of the exercise of the hand and arm. The tourniquet is not removed until the subject reports his pain is "unbearable." The time to effect this has varied from 3 minutes to 47 minutes.

Using our well-established techniques of the double blind approach, and so on, we found in comparing morphine with placebo that there was a consistent tendency for morphine to allay the development of pain at each of the 4 levels, but satisfactorily significant levels were found only at the upper two levels, namely, when the pain was "very distressing" or "unbearable." It finally was clear to us that if one deals with really severe pain, even though it is experimentally contrived, it will respond to morphine in a smooth fashion. It then became apparent that the difficulty with other experimental pain methods was that they focused on "threshold values." This concept of the importance of the threshold seems unquestionably to have been responsible for getting the whole experimental pain study problem off the tracks. We have now focused attention on the more severe levels of pain and we now can get satisfactory dose-response data.

This finding, now well established, is important in two respects: practically, there is great need for a method of appraising in man, conveniently and accurately, the effectiveness of new pain-relieving agents. I do not believe it is an exaggeration to say that all current methods for studying pain of pathological origin are derived from the tedious methods we have evolved over the last 20 years. There is great need, as I see, for a method which will not require the tedious use of pathological pain. Thus, I believe our present findings have wide usefulness to the pharmaceutical industry. But more interesting than this are the philosophic connotations, the basic science advancement, if you will, based on a more accurate insight into the factors involved in pain relief.

Thus the mystery we propounded 16 years ago and more, has now been resolved, and research on pain can proceed on a satisfactory experimental basis. Once again, if I may be forgiven for harping on an old theme, it is evident that truly basic advances in science, that is, advances of a conceptual nature, can be made in the clinic, derived from study of man.

HENRY K. BEECHER, MD

Dr. Beecher is Henry I. Dorr Professor of Research in Anaesthesia, Harvard University, and Chief of the Department of Anesthesia, MGH.

Treadwell Library

It is rather poetic justice that Dr. Edward Churchill should receive the 1965 John G. Treadwell Award; when he was on the Library Committee he had much to do with establishing this award. He also explored the enigma that was Dr. Treadwell, a leading practitioner of Salem whose large library was bequeathed to MGH in 1858.

Dr. Treadwell, a bachelor, had willed the bulk of his estate to Harvard on conditions then regarded as "singular and embarrassing," including one requiring Harvard to establish a chair of physiology to be filled by a competitive examination in the manner of the French *concours.* Dr. Treadwell's ideas on medical education were too advanced for his generation; Harvard declined the legacy, which reverted to MGH without conditions.

Dr. Treadwell graduated from Harvard College in 1825, obtained his medical degree in New York, and studied two years in Europe. The editorialist of the *Boston Medical and Surgical Journal* wrote after his death in 1856: "His manners were eccentric and somewhat abrupt, but . . . few practitioners have held more completely the esteem and confidence of his patients."

Photo by John J. Fields

In the above photograph Dr. John Knowles (right foreground) calls attention to the classic Bulfinch arches under the ceiling of the Ether Dome. In the front row (center) the man with folded hands is Herbert M. Turnbull of Putnam, Conn., a descendant of Gilbert Abbott, the first patient to undergo ether anesthesia at MGH, in 1846. Seated next to him is Edwin Small of the National Park Service, who holds the framed certificate designating the Dome a National Historic Site. In the photograph below, Mr. Small hands the certificate to Dr. Knowles.

Photo by Stanley Bennett from a helicopter

Aerial view of MGH in 1963

The Future: Myrrh or Miasma?

An address given by Dr. John H. Knowles, General Director, at the Alumni Luncheon on Reunion Day, October 16, 1965.

The immediate as well as the distant future presents problems and opportunities never before seen in such profusion and complexity, and what is true for the medical microcosm is true also for the country and the world at large. The increasing complexity of a superspecialized society is mirrored in increasing dis-ease — psychic, social and somatic. Increasing expectations matched by increasing costs demand that medicine give as much attention to the *application* of medical and scientific knowledge as it has given to the *acquisition* of knowledge over the past half-century. As Virchow said over 100 years ago: "Medicine is a social science; politics is nothing but medicine on a large scale."

What is the MGH doing and what does it hope to do in the future as regards the *acquisition* and the *application* of knowledge?

The Acquisition of Knowledge

The MGH has been at the forefront of those hospitals which acquire, conserve, and expand the knowledge of medicine through research and then pass it on to each generation of students through teaching programs in all areas of the hospital. We have never lost sight of the fact that our first function is the care of the sick, but we have also realized that to do this optimally demands that active teaching and research be present.

We have reviewed our research program and have recognized certain areas of weakness which are now being corrected.

(1) The Pierce Laboratories, which are being dedicated today, will be devoted to research in cardiopulmonary disease. Our clinical research in these areas has been outstanding over the years, with such people as Paul White, Edward Bland, Donald King, Edward Churchill, Helen Pittman. A new era of more basic approach to heart and lung disease has dawned, and biochemical and immunological techniques have now to be added to the older disciplines of clinical description and physiological measurement. I firmly believe that in Edgar Haber, Chief of the Cardiac Unit, and Frank Austen, Chief of the Pulmonary Unit, we have two of the most promising young men in American medicine today. Our future looks bright in these areas under their leadership.

(2) With the arrival of Dr. Paul Russell, the MGH is well prepared to move into the new era of reconstructive surgery (the spare-parts era) and the surgery of transplantation. Already Dr. Russell has built up an impressive team of surgeons and basic scientists, who are studying all aspects of these exciting problems. A special transplant unit has been constructed on White 12, and an impressive number of successful renal transplantations have already been accomplished. Dr. Gerald Austen, the youngest associate professor of surgery in the history of HMS, is the director of cardiovascular surgery. His contributions, added to those of Gordon Scannell, have already assured us of leadership in the acquisition of new knowledge and its rapid translation for the benefit of our patients afflicted with cardiovascular disease.

(3) Over the past 10 years the need for new research space has become obvious, and the east wing of the new building will increase our research space from roughly 110,000 to 160,000 sq. ft. This allows us to expand areas of basic research in renal and gastrointestinal disease under Alex Leaf and Kurt Isselbacher respectively; arthritis and connective tissue disease under Steve Krane and Jerome Gross; bone chemistry under Melvin Glimcher, physical chemistry under Roger Jeanloz, biochemistry under Herman Kalckar and Paul Zamecnik. The building will be financed by roughly 2 million dollars of restricted endowment funds, matched by 2 million dollars under the Federal Research Health Facilities Act.

(4) There has been a real need to

strengthen the Children's Medical Service, and over the past year three promising young men have been recruited to strengthen this service — Dr. Allan Goldblatt in pediatric cardiology, Dr. David Lang in virology, and Dr. John Littlefield (long with Paul Zamecnik's group) in genetics. These disciplines will now be formally developed in a more concerted effort. Dr. Nathan Talbot has moved fast and a new spirit pervades his service. In addition, Dr. Talbot plans to develop the whole area of preventive and social medicine in pediatrics with special attention to the problems of psychological maturation and the prevention of mental as well as somatic disease in children.

(5) Most of you are aware of the rapid and magnificent development of the Neurology Service under Dr. Raymond Adams over the past 15 years. Today this is one of the largest clinical, teaching and research departments in the world. With the recent addition of the Kennedy Laboratories and an affiliation with the Walter E. Fernald School (a state school for the mentally retarded) we have active groups in all areas of neurologic disease.

(6) Some of us have felt the need to develop active practice and research in preventive medicine and bring this influence to bear on the traditional (and I believe now severely limited) acute curative function of the hospital. Under Dr. Victor Sidel we now have such a unit, which is exploring the uses of hospital-based preventive medicine, and is analyzing the social, economic, demographic, and human behavioral patterns of our patients and their communities. The Unit will play a large part in helping us to rationalize our services — to plan regionally, to study utilization under the Medicare Law, and to more effectively organize and distribute our services. This development could not have arrived at a better time, and the Unit will function at the crucial interface of acquisition *and* application of knowledge.

(7) Working closely with preventive medicine and developing what will surely revolutionize hospital function and medical care is the Laboratory for Computer Science. Under the enthusiastic direction of Dr. Octo Barnett, a feasibility study of the use of computers in hospitals is in operation to find out where computers can be used to automate, store and retrieve, and correlate the incredible volume of information collected in a teaching hospital — from patients' admitting and billing, to the medical record and the chemistry laboratory (over 1200 separate test results per day), to basic research projects, to the ordering and giving of drugs to patients, and so on. The project is virtually unique in this country and presently has a 2 million dollar budget annually.

(8) The new Transfer Office has been developed by the new head of the Social Service Department, Miss Eleanor Clark, to study and research the best methods of transferring our patients (some 300 per month) to the proper nursing homes and to find ways of helping nursing homes to do a better job of nursing, dietary and medical care, and continuity of care. This office, in operation for over 6 months, is a vital first for the MGH, and we are one of the few hospitals in this country which looks with some confidence to the revolution in hospital and nursing home care which will begin on July 1, 1966 with the advent of Medicare.

(9) For years we have been concerned with our total effort in the field of cancer. We have felt the need for better diagnosis, radiotherapy, clinical research (e.g. the testing of new chemotherapeutic agents), basic research, and teaching — all of which add up to better care for our patients. With this in mind Drs. Russell and Zamecnik, with an ad hoc committee representing all these interests, have been working hard to plan for these needs. For the future it seems quite probable that we will plan a new structure where the Thayer Building now stands, adjacent to the Warren and Baker Memorial buildings, which will provide the best facilities for cancer therapy and clinical research, while bringing together the disciplines of radiobiology, viral oncology, genetics and immunology and biochemistry — research areas basic to the study of the origins, prevention and control of cancer. These plans have been evolving over the past several years and are now sufficiently developed to fit in very nicely with regionalization of our activities with community health facilities. The financing of part of this can be obtained through the new federal law concerned with heart disease, cancer and stroke.

(10) I could list many more areas of active research and acquisition of new knowledge — the Nursing Service and the development of the ward manager system and the redistribution of functions so that various caring groups will be using their skills and time most fruitfully; the Psychiatry Service, which is pioneering in the care of alcoholic patients, and social, community psychiatry; the Dermatology Service, Anesthesiology, and so on — and in my position I shall surely hear from those I have omitted!

I must mention the new Shriners Burns Institute, which will be built across the street from the Research Building. This small research and patient care unit will be administered by the Shrine but staffed with MGH doctors and researchers, thus giving our Staff further opportunities to contribute to this always difficult area of care and research.

The Application of Knowledge

The acquisition and expansion of knowledge proceed at an inexorable pace while the problems of financing, distributing, organizing and utilizing such medical knowledge in terms of caring for the sick and preventing disease grow apace and are not so readily solved. This hospital has a long and distinguished record of providing solutions to the social and economic problems of medicine, for example, the founding of medical social service at the turn of the century and the institution of the Baker Memorial fee plan of 1930. In recent times we have bent our energies and redoubled our efforts to provide solutions to contemporary problems. What have we done and what do we see as areas of responsibility and opportunity for the future?

(1) The Administration has worked tirelessly with the Staff and Trustees, and with the Blue Cross, commercial carriers, State Welfare Department, elected public officials, and the public at large — through every form of communication (including annual Lowell Lectures, radio and television, letters and publications, etc.) to explain hospital costs and the responsibility of state, federal, and private direct or third-party payers to share their appropriate portion of the burden. With the advent of Medicare, a change in hospital and physician services *and* revision of Public Welfare practices will occur and our activities in the political arena will increase.

Teaching hospital interests have never been adequately represented, and it can be a very frustrating pursuit to contend with politicians in this state (at least) who play incredible games, moving only in response to pressure, and almost never because something is right or necessary. Long-range statesmanlike action usually falls before the popularity contest. In this state we have a Legislature that passes a law to allow collective bargaining for hospital employees, thereby evincing an apparent interest in their lot, while simultaneously refusing to reimburse hospitals equitably for their services to the state's indigent sick, though recognizing that three-quarters of the money thus paid to hospitals goes into the salaries and fringe benefits of our employees.

The politicians of course have got it both ways, so to speak, but I wonder whether the public will tolerate this shabby game forever. I think not

Continued on Page 10

— even though, as Judge Learned Hand said, "the apathy of the modern voter is the confusion of the modern reformer" — and we are busily educating the public (and being educated by them) so that their "inalienable birthright" will be treated as such by the all-powerful politicians. Our experience here will be helpful as our "beat" enlarges to include Washington, D.C. and the problems of federal reimbursement for care.

(2) We have initiated a Preventive Medicine Unit and with the Computer Laboratory have initiated social, economic and demographic studies which will tell us clearly what we are and aren't doing, and point the way to more rational use of our services. In addition we are working very closely with the State Department of Public Health to bring the hospital nearer to public health activities, disciplines which have been segregated from the teaching hospital for much too long.

(3) I have already referred to our activities concerning the problem of adequate facilities for extended aftercare of our patients, specifically nursing homes, and our new Transfer Office, which incidentally has just received nearly $200,000 from the Bureau of State Services for use in supporting its studies aimed to improve the care of our patients when they leave us for the nursing home.

(4) The recruitment of qualified personnel to work in hospitals can be enhanced by (a) the easy availability of in-service educational opportunities; (b) scholarships; (c) better pay, fringe benefits, adequate working and living conditions and (d) the understanding help of an enlightened medical staff. We are constantly concerned with the inadequate supply of medical, nursing and hospital manpower and have initiated changes in the areas listed above to help solve the problem.

(5) The ambulatory services of most urban teaching hospitals have been totally neglected — and paradoxically so, for it is here in the emergency ward and ambulatory clinic that we have our best door to the community for the purposes of giving continuing, comprehensive care and coordinating it with the other caring agencies of the community to make medical care more efficient and less costly. Several of our MGH clinics are actively working in these areas with great success — e.g., Dermatology, Psychiatry (and the Alcohol Clinic), and Pediatrics. The general medical clinic has been improved but we expect much more in the years to come. Meanwhile you have noticed the changes in the whole environment of the Clinics Building, and it no longer can be called the cattle car or railroad station of medical care. One dignified social environment for the sick regardless of their social or economic status is the aim of this hospital — and that doesn't mean we are socialists; it merely means that there can be only one standard of care for the sick, and that is the best care, in decent, dignified surroundings.

(6) Regional planning of hospital and other medical care facilities has never done what it should have on a voluntary, local community basis. The Medicare Law and the Heart Disease, Cancer and Stroke Law encourage rational planning with the persuasion of federal money. We must participate optimally under these new laws; and just as important, the voluntary, private system must now pull itself together and demonstrate its own responsibility without the necessity of federal intervention. Surely if hospitals and the medical profession drag their heels as they have done in the past, we can all look to the day of complete federal control.

Once again, this hospital and its Staff have the opportunity to demonstrate their social responsibility by providing solutions to the massive social and economic problems which face the public, state and federal government, and all who work in hospitals. These problems will expand with Medicare and the Heart Disease Law, but they offer exciting opportunities to turn what some call defeat into improvement of medical care for the citizens of this country. We are reviewing with the General Executive Committee, the Baker-Phillips House Committee, and the MGH Associates these problems and enlisting their help in providing solutions. The Administration is actively studying the possibilities of active regionalization with various segments of the community.

(7) We are, as we have been for many years, interested in acquiring the Suffolk County Jail property on our south side so that adequate parking and much needed room for expansion of critically needed facilities can be obtained for the future. We are working actively with the Massachusetts Eye and Ear Infirmary and the Boston Redevelopment Authority to this end, and I am sure that in the not too distant future we will be successful if (1) we can achieve rational, "regional" planning with the Eye and Ear Infirmary and if (2) the BRA and City Hall understand the critical nature of the two hospitals' needs. We have spent untold hours, months and several years on this problem and I believe we are making progress, though very slowly.

(8) This is only an incomplete listing of some of our activities as we struggle to improve the care of the sick and the teaching and research that attend their best care. Our most important steps have been outlined — and you are all aware of our new building on the north side of the hospital, which (for 12.5 million dollars) will expand and centralize all our surgical operating rooms and central sterile supply; give increased space to Clinical Chemistry, Bacteriology, Blood Bank, and various diagnostic facilities; expand and improve our dietary facilities, admitting and discharge offices, and ultimately our radiology facilities. The upper floors will be unfinished initially, so we can rise rapidly to the future needs of our community and achieve coordinated, central planning.

We hope you share our pride and vigorous excitement about the present and future of this great hospital. It has changed, yes, but its great traditions of caring and excellence persist. It has never failed its community, and the community has never failed it. The community includes first our patients and our friends, then the Harvard Medical School, the City of Boston, and the state, the Blue Cross and third-party payers, the federal government — and countless numbers of us who look upon this hospital as their alma mater and forever stand in its debt. The future is neither myrrh or miasma but one of promise, hope and hard work.

Lowell Lectures Published

A book entitled *Hospitals, Doctors, and the Public Interest,* edited by Dr. John H. Knowles, was issued in November by the Harvard University Press. It comprises the Lowell Lectures given at MGH in 1963 by 15 speakers on "The Hospital's Responsibility to the Community."

The lecturers are pre-eminent in medicine, administration, and social welfare: John Knowles, Ellsworth Neumann, George Reader, Martin Cherkasky, Ray Trussell, Jack Masur, Osler Peterson, Jerome Pollack, Herman Somers, Charles Schottland, Edward Churchill, Russell Nelson, Thomas McKeown, Erich Lindemann, and David Rutstein.

The purpose of the book was not only to educate the public but also to fill "an incredible blind spot in the physician's intellectual equipment." In his preface Dr. Knowles wrote: "Better understanding of the hospital, its historical evolution, its present problems, and its obligatory role as a social, as well as an educational and scientific instrument, is necessary if the medical profession wishes to keep the use of this instrument in its own hands, and if the community wishes to see the best reflection of its humanitarian efforts."

Dr. Champ Lyons

(1907 — 1965)

Dr. Champ Lyons, Kerner Professor of Surgery at the University of Alabama, died from a brain tumor on October 24, 1965. He was a graduate of HMS (1931) and an alumnus of MGH, having completed a residency on Dr. Edward Churchill's West Surgical Service in 1936. He began his professional career here.

As early as 1935 he was studying the devastating infections caused by hemolytic streptococci, when the only promising treatments appeared to be immunotransfusion and the vaccines. This led him into close association with Professors Hans Zinnser and Hugh Ward at HMS.

He pioneered in the use of "sulfa" drugs; and during the Cocoanut Grove episode at MGH in 1942, his trial of penicillin in burn therapy was immediately surveyed by the National Research Council and the Armed Forces.

His work in the Medical Corps in North Africa and Italy during World War II was recognized by conferral of the Legion of Merit. His citation (which, incidentally, was composed by Col. Edward Churchill) read in part:

"Major Lyons initiated and guided the methods by which the new and potent agent penicillin has been utilized in the treatment of the seriously wounded. From the most forward mobile hospitals to the large general hospitals of the interior, he has personally operated upon and studied the treatment of the wounded, instructing his seniors and subordinates alike in a change of surgical procedures that is productive of better results. Lives and limbs of soldiers have been saved and the disability and deformity of wounds materially reduced. His professional judgment, combining a basic knowledge of the science of bacteriology with skill and experience in practical surgery, has cast new light on the age-old problem of wound surgery."

After the war Dr. Lyons worked in the Ochsner Clinic and Tulane University in New Orleans. In 1950 he became professor of surgery at the new University of Alabama Medical Center in Birmingham. One of his goals was realized in 1959 with the dedication of the Luther Hill Heart Center. He was widely respected for his foresightedness and courage in facing up to the problem of racial integration as it applied to the academic sphere.

Dr. Lyons was the first president of the American Heart Association, a member of the National Advisory Heart Council, and chairman of the Board of Regents of the National Medical Library.

Dr. Champ Lyons

Dr. Sanders Dies

Dr. Morris B. Sanders (East Surgical Service, 1920), a former member of the Urology Service, died on September 21, 1965. An article on "The Mission of Dr. Sanders" at the American Hospital of Paris had appeared in the June issue of *The NEWS of MGH.*

The Sandy Bay Historical Society, of which he was formerly president, plans to establish a memorial fund in his memory. Those interested may mail their contributions to Mrs. Richard H. Recchia, Box 27, Rockport, Mass.

Dr. Sanders had visited the MGH Archives several times recently to collect material on Dr. Sumner Jackson of the American Hospital of Paris.

Letter From Mrs. Dicks

The obituary and tribute to the Rev. Russell L. Dicks in the June issue of The NEWS of MGH led Mrs. Dicks to write a letter dated Nov. 1 to the Rev. Allan W. Reed, MGH Chaplain. Following are excerpts from this letter:

Just a note of thanks for sending me the *NEWS of MGH* . . . It was a real thrill to see the write-up of my husband, Russell Dicks. He would have been very pleased. MGH held a very special place in his heart as well as mine. You know we were both there the same years . . . Dr. Claude Welch's wife was my roommate both at Northfield Seminary and at MGH (School of Nursing) . . . I have been most fortunate in getting this wonderful job as Asst. Dean of Women here at Wesleyan College (Macon, Ga.) . . . Duke Hospital is making an interesting collection of Dr. Richard Cabot's and Russell's things . . . and the new chapel of the Hospital will have memorials to both. Sincerely,

Dorothy Dicks

Dr. Glimcher Appointed Chief

Dr. Melvin J. Glimcher has been appointed jointly the Chief of the Orthopedic Service at MGH and the first Edith M. Ashley Professor of Orthopedic Surgery on the Harvard Faculty of Medicine. He succeeds the late Dr. Joseph S. Barr, who had held the John B. and Buckminster Brown chair of orthopedic surgery.

Dr. Glimcher has been director of the MGH Orthopedic Research Laboratories since its opening in 1961, where his major research effort is a basic study at the molecular level of the organization of bone and of tooth enamel and the physicochemical basis of calcification. A review of his plans for the Service will appear soon in *The NEWS of MGH.*

The blackout at 5:21 PM on November 9, following the massive failure of the 8-state electric power line grid, gave the MGH Disaster Plan a realistic trial. The response of staff and personnel was excellent, as was to be expected, but a number of technical "bugs" were revealed. These are now being corrected. The five auxiliary diesel generators produced adequate power for key areas within seconds, although the cafeteria had to function by candlelight.

Warren-Baker 12, formerly the home of various administrative units, has been converted into a care unit for Baker Memorial and some Phillips House patients. Open house was held on November 12. The planning and decor by Dr. Ellsworth Neumann and his consultant, Mr. Paul Lancaster, won the praise of all observers.

A Prize Photograph

John J. Fields, photographer in the Electron Microscopy Laboratory, won first prize in the annual Arts Festival at Manchester, Connecticut in October. Mr. Fields was given the same award also in last year's competition.

His 1965 entry was published for the first time in *The NEWS of MGH* last June, along with his essay on photographic art. It has been on display twice in this hospital. This mood study of a hayrake silhouetted against a November sun will be number one in an exhibition on the decadence of the New England farm.

His Ether Day photographs, some of which appear in this issue of *The NEWS of MGH,* have been on recent display in the Hospital.

Photo by Hannelore Steinbeck

Graduates of 1965 Course for Directors of Hospital Volunteers receive certificates from Dr. Ellsworth T. Neumann, Administrator. From left: Miss Allison Parker, Swampscott; Miss Leonor Saenz and Mrs. Consuelo Rueda de Vollmer, of Bogota, Colombia; Dr. Neumann; Mrs. Susan S. Manello, Newton; Mrs. Constance B. McGee, Natick; and Miss Mary Ruth Wolf, Director of MGH Volunteers, and originator and director of this course.

Centrex Arrives at MGH

In the quiet of Sunday pre-dawn on November 28, the old 8-position PBX on White 14 was replaced by Centrex, the latest innovation in electronic telecommunications. Centrex enables an outside caller to reach a desired extension directly by dialing the new MGH exchange, 726, plus the four digits of the extension.

Even more important than speeding up the process is the fact that Centrex is geared to expand apace with the rapidly increasing volume of telephone traffic flowing through MGH. The change to Centrex involved completely new equipment and miles of new wiring, the rerouting and renumbering of 2,122 phones, and the publication of a new phone directory, as well as working out new procedures for large departments. The telephone workers deserve the heartiest of applause.

How will Centrex be received? Let the energetic MGH Coordinator of Communications tell you in limerick:

There was a fellow — you name him —
Who didn't like change, and who'd blame him.
It's a nuisance to alter;
But, it's alter or falter
In this fast-crowding world we all claim in.

So this fellow — let's just call him Who-zit —
Figured, if progress must be, then he'd use it.
So, he made himself knowing
Of all that was going.
And, his fear of all change? He did lose it!

Evelyn Dunn

Citation Volume Given Dr. Means

Intimate associates of Dr. J. Howard Means held a small dinner party in his honor at the Tavern Club on October 2, the occasion being his attainment of his 80th year. He was presented a citation volume containing the following introduction:

"This volume is a tribute to James Howard Means on the occasion of his eightieth year. Those of us who are privileged to sign it have all been his students in one way or another. Our careers and our attitudes have in large measure been shaped by his example, his gentle persuasion, and his wise counsel. In the classic tradition of gratitude of students to their teacher, we record here our appreciation.

"Some of us first met Howard Means in the lecture hall, and there learned the value of clear and simple exposition. Some of us first met him at the bedside of the sick, and there learned the value of consideration, sympathy, and tact, and the difficult art of acquiring medical information and making it meaningful. Many of us learned to know him in the discourses of the Thyroid Clinic of the MGH, which he started and which has always been his favorite project. There we learned the value of free discussion, novelty of idea, enthusiasm for the problem at hand, and the excitement which is best found by probing in depth. Over the years all of us have learned to know Howard Means as a loyal friend and companion, and this has been best of all.

"The curriculum vitae and the long list of publications which follow form the bare outline of a remarkable career. His interests have ranged widely from medical science and its application at the bedside to medical statesmanship and the ethical problems of medical practice. In all his endeavors his scope has been direct, broad, and luminous, like his water colors which many of us treasure in our homes. His many honors have been appropriate. We who have known him and continue to sit in his circle are fortunate beyond reckoning."

The picture to the left shows 3 newly elected directors on the National Board of The Arthritis Foundation being greeted by their president at annual meeting held at the New York Hilton Hotel. From left: Ralph G. Boyd of Boston, Dr. Marian W. Ropes of MGH, Dr. Charles L. Short of MGH, and Dr. William S. Clark, president of the Foundation.

The NEWS of MGH

Vol. 25, No. 1 Boston, Massachusetts January-February 1966

New Chief of Medical Services Equates Caring and Scholarship

The name of Dr. Alexander Leaf has been added to the list of men who have received concurrent appointments as Chief of the Medical Services at MGH and James Jackson Professor of Clinical Medicine at Harvard. He succeeds Dr. Robert H. Ebert, who became Dean of the Harvard Faculty of Medicine last July.

Dr. Leaf will continue to serve as Chief of the MGH Cardiorenal Unit, which he started in 1956 in his role as Chief Cardiovascular Investigator.

Dean Ebert, in commenting on the appointment of his successor, stressed that Dr. Leaf's proven ability in research and teaching is matched by his devotion to patient care and his concern for the social problems now confronting American medicine. Dr. Leaf especially desires to develop the ambulatory service clinics at MGH, and in fact he took time out to visit such clinics in New York City and New Haven shortly after learning of his new appointment.

Dr. Leaf, who is now 45 years of age, was graduated *magna cum laude* from the University of Washington in 1940 and was graduated *cum laude* from the University of Michigan Medical School in 1943. He interned at MGH (1944) and served a medical residency at the Mayo Foundation. He served in the Army Medical Corps in 1946 and 1947, and then became an instructor at the University of Michigan.

His interest in the application of physiological principles to clinical problems was first stimulated at Michigan by the late Professor Louis Newburgh, a protégé of Dr. David Edsall and Professor Lawrence Henderson. Thus it can be seen how the Harvard-MGH influence works in cycles!

Dr. Leaf returned to MGH in 1949 to work with Dr. Fuller Albright's group as a clinical and research fellow. A year later he was given a small laboratory on the top floor of the Domestic Building and began to study kidney function. Between 1954 and 1956 he was in Europe working under Professor H. A. Krebs in the department of biological chemistry at the University of Oxford, and under Professor Hans Ussing in the Zoophysiology Laboratory at the University of Copenhagen.

In 1956 he succeeded Dr. Ivan Frantz, Jr. as Chief Cardiovascular Investigator at MGH and established the research laboratory of the Cardiorenal Unit of the Medical Services. His primary objective at that time was the elucidation of active ion transport across cell membranes. Dr. Leaf defined, for the first time, the consequences of excessive water retention in the edema of heart failure, cirrhosis, and nephrosis in man.

Photo by Stanley Bennett

Dr. Alexander Leaf

Recently Dr. Leaf became chairman of the HMS standing committee on the medical curriculum, succeeding Dr. George Thorn. This committee is currently considering the feasibility of broadening the curriculum and permitting undergraduates a greater degree of selectivity in the matter of courses that would prepare them for their future areas of specialization. Dr. Leaf is also concerned with the feasibility of introducing more university influence into postgraduate residency programs in private hospitals.

Dr. Leaf is the ninth incumbent of the Jackson Chair, which was established by Harvard University in 1859. Three of these incumbents subsequently became dean of the Medical School (Ellis, Edsall and Ebert).

Preceding Dr. Leaf as Chief of the Medical Services at MGH have been *only* five men: James Jackson (1821-1837), David Edsall (1921-1923), J. Howard Means (1923-1951), Walter Bauer (1951-1963), and Robert Ebert (1963-1965). The time gap in this list is readily explained:

In 1837 three separate medical services were established by the Board of Trustees, each to serve in rotation for four months of the year. Much later, there were only two medical services—East and West — each headed by a chief with year-round tenure but each staffed by three rotating teams of senior physicians during the year. Such division of staff responsibility would be fatal to MGH today! The reintroduction of the single-service, single-chief system came with Dr. Edsall in 1921.

Dr. John H. Knowles, General Director, sums up the story of this new appointment: "All of us who have worked with Dr. Leaf know him as an accomplished scholar, an excellent clinician and teacher, and a fine administrator. (Indeed, the report of the ad hoc committee extolled his many virtues and concluded with the statement, 'In him, a temporary overload will never cause a blackout.') His leadership of the Medical Services and the Harvard Department of Medicine at MGH assures both institutions of strength and continued excellence in the crucial days and years ahead."

Visitors from abroad: Welcome! Please register at Service League Reception Center on Moseley I for help in finding housing, furniture, schedules, etc. **Everyone else:** Donate tickets you cannot use (symphony, etc.) at Reception Center for our visitors.

Commissioner McCarthy Certifies More Equitable Hospital Rates

For the first time in the history of Massachusetts the voluntary nonprofit hospitals are being permitted to charge public welfare agencies at nearly the full and up-to-date cost of caring for the medically indigent patient. For this, the hospital administrators are grateful to John J. McCarthy, State Commissioner of Administration and Finance, who on February 3, 1966, certified the rates at which these agencies are to reimburse hospitals this year, retroactive to January 1.

The new rates are generally consistent with the obvious principle that if a nonprofit institution's income is derived principally from receipts for services rendered, the institution must equate charges with costs in order to break even financially. During the past two decades, unreimbursed hospital costs have far exceeded endowment income and donations, and net operating deficits have been met only by overcharging private patients.

At MGH the per diem reimbursement rate for welfare patients has been increased from $42.85 (in 1965) to $54.32 (in 1966), a difference of $11.47. At the Massachusetts Eye and Ear Infirmary the rate has gone up from $40.52 to $46.53.

Under state law these rates are set annually by the Commissioner of Administration and Finance on the basis of a formula derived from cost information collected by the Bureau of Hospital Costs and Finances from all state-licensed hospitals. Although it was originally the intent of the legislature that hospitals be reimbursed at nearly full cost, the Bureau has arbitrarily excluded certain cost factors ever since it was activated in 1954.

For example, when hospitals wanted to use as a cost factor in the Blue Cross contract the amounts they lost annually in giving free care to medically indigent patients (after applying available endowment income and donations), these amounts were invalidated on the ground that they are posted as "deductions from earnings" on the income side of the ledger, rather than on the expense side. At MGH in 1962, "deductions from earnings" amounted to more than $3 million.

The Bureau of Hospital Costs and Finances also applied arbitrarily an automatic 10% discount on costs of caring for welfare patients. Furthermore, the Bureau customarily used cost information dating back as much as two years, rather than the current cost information supplied by hospitals.

Commissioner McCarthy, since taking office in January 1965, has been rectifying these inequities by conscientiously carrying out his duty to set reasonable reimbursement rates to hospitals under the terms of the law. He instructed the Bureau of Hospital Costs and Finances to utilize current costs and charges as reported by the hospitals, and he has in effect reduced the arbitrary 10% discount to 5%.

Officials of the Massachusetts Hospital Association estimate that, if Medicare were not to enter the picture, the 1966 state rates would yield about $8 million in increased revenue to its aggregate membership, thereby enabling the hospitals to come closer to breaking even financially. Local and state welfare agencies will not have to pay that much above their 1965 expenditures, because after July 1 of this year many elderly welfare recipients will be enrolled in Medicare. It remains to be seen how Medicare reimbursement rates will compare with state rates.

A Public Hearing

On January 26, 1966, Commissioner McCarthy conducted at the State House a public hearing on hospital reimbursement rates as required by law. About 200 hospital administrators were in attendance and heard the Commissioner pledge to certify rates that would be more equitable to hospitals in 1966. It was interesting and illuminating to note at this hearing how much state officials can differ in their approach to public problems.

Commissioner McCarthy, in defending the above-mentioned current costs factor, commented: "It is the height of arrogance for the State to assume it can pay hospitals a fee based on costs (as they existed) 27 months ago. I am shocked that any public official should feel that hospitals should do this. They would not expect welfare recipients to be able to buy groceries at prices 27 months old" (as reported in the *Boston Traveler,* January 26, 1966).

Nevertheless, Theodore W. Fabisak, Director of the Bureau of Hospital Costs and Finances, and Peter G. Arlos, a member of the State Group Insurance Commission, both spoke in sharp opposition to the Commissioner's views. Mr. Arlos urged the Commissioner not to be "unduly impressed with the poor-mouth approach used by the highly paid lobbyists of the hospital clique" (*Boston Traveler,* January 26).

By the term "clique" Mr. Arlos meant presumably such speakers at the hearing as Dr. Richard Viguers, current president of the Massachusetts Hospital Association; Dr. Sidney Lee of the Beth Israel Hospital in Boston; Dr. Leonard Cronkhite of the Children's Hospital Medical Center in Boston; Harry Gifford of the Springfield Hospital; and Dr. John Knowles of the MGH.

It would appear that one occupational hazard of being a hospital administrator is being a target for political barbs and brickbats.

Legal Decisions

A decisive legal battle is shaping up. Last fall, Commissioner McCarthy authorized an adjustment of the welfare reimbursement rates which between October 1 and December 31 would mean an increase in revenue to the hospitals in the state totaling $1.2 million (not $4.5 million, as estimated in some quarters). The adjusted rates were challenged, and Attorney General Edward W. Brooke filed a bill in equity in Supreme Judicial Court to invalidate them on the grounds that the 1965 rates had been certified by the Commissioner earlier in the year and that the law authorizes only one such certification of rates during a calendar year. This action was withdrawn when Commissioner McCarthy wrote to the Secretary of State, Kevin H. White, on November 12, stating that the Attorney General had claimed that the Commissioner of Administration had no authority to set new reimbursement rates in October 1965. This letter of November 12

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The NEWS of MGH

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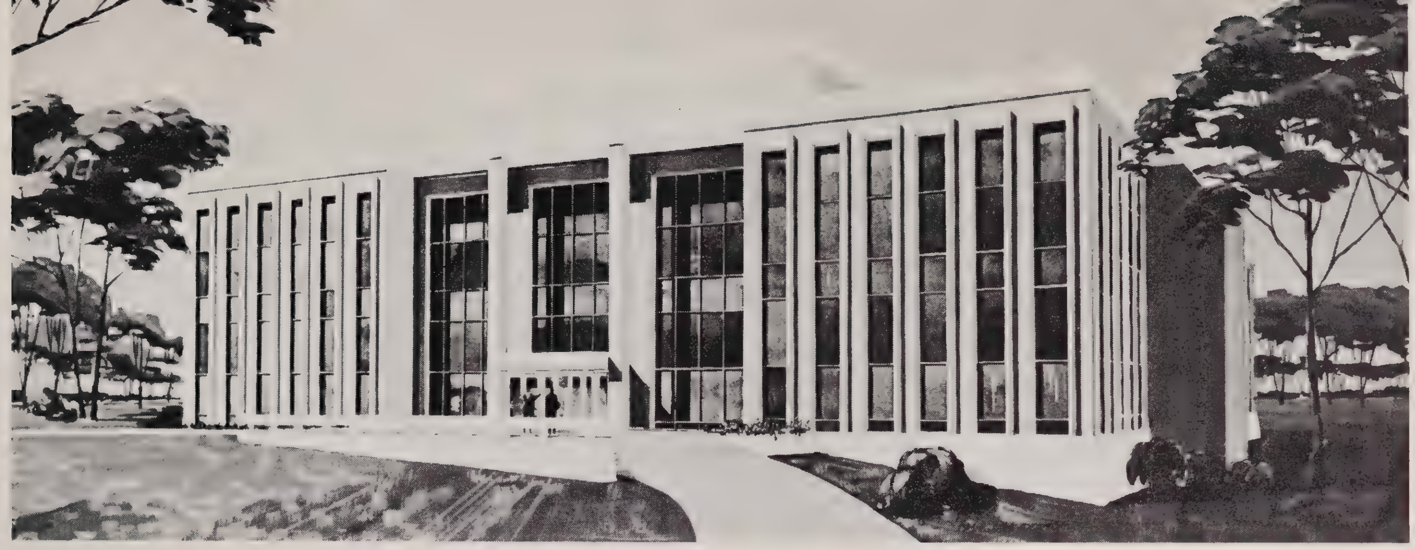


Shriners to Start Construction in June

In Christmas week of 1962 the Trustees of the Shriners Crippled Children's Program approached the MGH about the possibility of founding a burn unit in collaboration with MGH and HMS. They were contemplating enlarging their program for crippled children and had been advised by their medical board that the burn problem needed research as well as patient care. They proposed to the MGH that they build an institute next door to the Hospital and that Harvard and MGH should staff it. The word "institute" was used advisedly to distinguish the proposed unit from the Shriners Orthopedic Hospitals, 17 of which are strategically placed across North America.

The Shriners Orthopedic Hospitals are designed for the free care of crippled children. In the case of the new institute it was proposed by the Shriners that half of the operating budget be spent for the care of burned children and half for research and teaching. It was the latter two elements which necessitated that the institute be built as a working part of a university teaching hospital and that it be staffed as any teaching hospital by an academic staff.

For several months the Shriner Trustees and the MGH representatives discussed the numerous implications of the proposed association. The two principal negotiators were Judge Robert G. Wilson, Jr. for the Shriners and Mr. Elliot L. Richardson, then an MGH Trustee. Finally in March 1964 an agreement was signed by both boards of trustees for building and staffing the Boston Unit of the Shriners Burns Institute. (Two other burn units of the Institute have been established in Galveston and Cincinnati.)

A pilot project interim operation was formally started on April 1, 1964. The Shrine has since obtained from the Boston Redevelopment Authority approximately an acre of land on Blossom Street opposite the Research Building of MGH. Detailed plans for the new building have been drawn by the Shrine's architect, Ellerbe and Company of St. Paul, Minnesota, with the collaboration of the MGH Staff, Judge Wilson, and the Building Committee of the Shrine. The local architects are Perry, Dean, Hepburn and Stewart. The final working drawings are soon to be sent out to contractors for bids, and construction should start next June.

Dr. Oliver Cope

Dr. John Burke and Dr. John Constable of the Surgical Staff, MGH, and Dr. John Crawford of the Children's Medical Service, MGH, have been responsible for the concepts embodied in both the patient care and the laboratory areas of the building. Their concepts are new and exciting.

There will be three floors and a basement. The top floor will house the entire in-patient facilities for 30 patients and the operating facilities. The second floor will be devoted entirely to research laboratories, with office facilities for six of the full-time investigators. The ground floor will contain an outpatient department, the physiotherapy facilities, a library and offices for five of the full-time professional staff (Chief of Staff, Chiefs of General Surgery, Plastic Surgery, Pediatrics, and Psychiatry), the Administrator, and the Chiefs of Nursing and Social Service. There is generous space for a medical library, a conference room, a kitchen and a dining room. Also on this floor are the medical records facilities and a photographic laboratory.

The auditorium is of special note. It occupies two floors (basement and ground floor) and will accommodate 233 persons. It is built on the theater-in-the-round principle, allowing each person to face at least two-thirds of the audience. Its configuration should encourage conversation and free exchange of opinion among those present, whether few or many in number, and will also make it possible to view at close range the patients brought in for discussion.

The basement and the bottom floor of the auditorium will also accommodate coat rooms and washrooms, storage space, and a concrete encased facility for experimentation in radiation injury.

Mr. Henslin, of Ellerbe and Company, has suggested an unusual and appealing way of placing the building. Instead of being parallel to the streets (Blossom and old McLean), it would be placed on the 45° diagonal in such manner that the view from the front of the building looks northwest beyond the Research Building, over the low-rise buildings and between the high-rise buildings of Charles River Park toward the Museum of Science.

Continued on Page 5

Transfer Office Anticipates Medicare

For far too long, acute-care hospitals have failed to be interested in the problem of the chronically ill patient. Nursing homes and chronic-care hospitals are our primary long-term medical facilities for meeting the health needs of the chronically ill and the elderly; and such facilities have also become a major component of comprehensive medical care. Yet these facilities are usually quite isolated from acute-care hospitals, both geographically and in terms of communication. Cooperation between them all too often consists merely of very informal arrangements for transferring patients, with limited communication about the patient's needs or the plans for the continuing care of the patient. The patient's care subsequently suffers from this lack of coordination.

In addition, hospital staffs frequently know too little about the facilities, resources, and services available in nursing homes. As a result the needs of patients are often poorly matched with the nursing home's capacity to meet them. Nursing homes in turn are beset by many problems of staffing and financing, inadequate diagnostic services, and inability to provide up-to-date education for the staff.

MGH Takes Action

About a year ago the MGH Administration and Board of Trustees responded promptly to a proposal by the Social Service Department that a discharge planning unit be established within the Department. The essential objective of this unit was to demonstrate that closer cooperation between a teaching general hospital and nursing homes will provide a higher level of extended care for patients.

Toward this goal such a unit — called the Transfer Office — was staffed and activated last March. At the same time a request was submitted to the Bureau of State Services, U. S. Public Health Service, for additional financial support during the first three years of this program. This grant ($190,000) was recently funded.

The staff of the Transfer Office (Miss Joanne O'Brien, RN, Mrs. Suzanne Deutsch, and Miss Geraldine Lagammo) have visited extended-care facilities all over eastern Massachusetts, particularly the more than 100 nursing homes in the Greater Boston area, and have also surveyed the patient population which MGH is referring to nursing homes. Dr. Edward Young, chairman of the MGH Social Service Advisory Committee, has participated in the visits to nursing homes. The primary objectives were to select nursing homes which can offer the level of care needed by our discharged patients and to develop a closer working relationship with their staffs.

In brief, we have found that about 60 of the nursing homes visited offer good moderate care, but also that nearly all the homes need a great deal of help in carrying out the very complicated pattern of care needed by the majority of our discharged patients. For example, many of these homes do not have a registered nurse, or have only one nurse on one shift. Few of the homes offer knowledgeable provision of special diets or physical therapy. Knowledge about drugs and their use is often inadequate.

Data about Referred Patients

Twice each year Mary E. Quinlan, Assistant Director of Nursing, prepares a statistical report regarding referrals for continuity of care. The total number of referrals has been increasing at the rate of about 20% per year. According to her first 1965 report, 226 patients were referred to nursing homes and 45 to chronic-care hospitals in March. Certain characteristics of 175 of the 226 patients were tabulated (see the accompanying table). A few statistics from this study follow.

- About 78% of the 175 patients were over 65 years of age. Of those over 65, about 75% had help from public agencies in paying for their care. Of those under 65, about 59% had similar help from public agencies.
- About 40% of the 175 patients were referred to nursing homes in Boston, 43% to homes in the suburbs north of Boston, 7% to the suburbs south of Boston, and 7% to the west of Boston. A small number were sent to nursing homes in other states.
- About 81% of the patients had two or more diagnoses.
- Half of the patients required two or more nursing orders.
- Somewhat more than half of the patients required three or more medications.
- About 42% required a special diet.
- Outpatient follow-up was planned for 67% of the patients.

Through the Transfer Office the MGH offers to selected nursing homes a consultative working relationship. The essential objectives of this continuing demonstration study are:

1. To test the proposition that closer cooperation between a teaching general hospital and nursing homes will improve the care of patients.
2. To demonstrate that a coordinated discharge planning unit in an acute-care hospital will facilitate closer cooperation between nursing homes and the hospital.
3. To learn the most effective methods of communication, association, or affiliations between nursing homes and hospitals, which will contribute to continuous and comprehensive care for patients.
4. To develop methods of consultation and educational exchange which benefit nursing home personnel.
5. To expand the learning opportunities for hospital personnel and students in various disciplines (medical, nursing, social work, and dietary) to further their understanding of the problems and methods of care and rehabilitation for patients with long-term chronic illness.
6. To determine the extent to which the closer cooperation proves to be effective.

The help of the MGH Staff is needed in the consultation process with nursing homes. Our goal is to match patient needs to the capacity of the

175 MGH Patients Referred to Nursing Homes (March 1965)

AGE GROUP	Needed minor nursing care but without family	Needed extensive nursing care but without family	Needed extensive nursing care, beyond capacity of family to provide	TOTALS
Under 65 yr.	8	20	13	41
Over 65 yr.	21	49	64	134
TOTALS	29	69	77	175

Photo by M. R. Fish, Northampton, Mass.

Miss Eleanor Clark (third from left) was one of 3 alumnae to receive the Smith College Medal on Nov. 3, 1965. She was cited for outstanding service as a social worker and administrator both at MGH and in the community. The other two alumnae pictured are Mrs. Laura Cabot Hodgkinson (left), first woman president of the Boston Museum of Science, and Mrs. Margaret Cook Thomson (center), formerly a missionary teacher in China and other Asiatic countries. The gentleman, who presented the medals, is Thomas C. Mendenhall, president of Smith College.

extended-care facility. This requires the help of each member of the professional team within the hospital in order to make the most appropriate plans for discharged patients. If the Transfer Office can help in the planning for any patient, it can be reached at telephone extension 2610.

Eleanor Clark
Chief of Social Service

Miss Clark was recently appointed to the Advisory Council of the Massachusetts Federation of Nursing Homes, Inc.

Reimbursement Rates . . .

Continued from Page 2

was generally interpreted as rescinding the October rates, but it does not constitute a regulation and its effect remains in doubt until the court rules on it.

In the meantime, many hospitals, including MGH, brought suit in the courts for reimbursement in accordance with the rates set in October 1965. Furthermore, the hospitals have challenged legally the entire rate structure and the assumed right of the state government to set hospital rates in the first instance.

All parties are presently engaged in drawing up the facts of the problem for presentation to the Supreme Judicial Court for an early and definitive determination of all contentions. The year 1966 will be of great consequence to hospitals in Massachusetts.

The course of this legal battle will be reported in The NEWS of MGH, *together with analyses of MGH costs, of which more than 70% consist of salaries and wages.*

A related article appeared in The NEWS of MGH *for November* 1964.

Shriners . . .

Continued from Page 3

The Institute will be connected by tunnel to the basement corridor of the Research Building. The building is planned with the intention of avoiding duplication of facilities available within the MGH. Thus the patients will be transported through the tunnel to the MGH Radiology Department for any examinations beyond the routine chest plate. The MGH Chemistry Laboratory will be utilized for patient care examinations.

The entire staff of the Burns Institute is that of the MGH. There will be those whose primary duty is devoted to patient care and research in the Institute. In addition, all of the MGH Staff will be considered consultants to the Institute, in the same manner as to any other service of the General Hospital.

Oliver Cope, MD
Chief of Staff, SBI
Visiting Surgeon, MGH

The above address was given before the MGH House Pupils Alumni Association on Reunion Day, Oct. 16, 1965.

Lowell Lectures

The 1966 course of free public lectures offered by the Lowell Institute and entitled Views of Medical Education and Medical Care is nearing completion. With one exception, they are being held in the Moseley Auditorium at MGH. Dr. Knowles's lecture was given at the Sheraton-Boston Hotel as a feature of the Boston Winterfest. The list of lectures:

A Physicist Views Medical Education and Medical Care, by Jerrold R. Zacharias, Prof. of Physics, MIT. (Feb. 2)

Social Scientists in Medicine, by Dr. Nathan B. Talbot, Chief of Children's Service, MGH, and Charles Wilder Prof. of Pediatrics, HMS. (Feb. 9)

The University President's Views, By John S. Millis, President of Western Reserve University. (Feb. 16)

The Rationalization of Health Services and Medical Education, by Dr. John H. Knowles, General Director, MGH, and Lecturer on Medicine, HMS. (Feb. 23)

Medical Education and the University, by Dr. Robert H. Ebert, Dean, HMS. (Mar. 2)

The Politician Views Medical Education in the Social Context of Medicine, by the Hon. Elliot L. Richardson, Lieutenant Governor, Commonwealth of Massachusetts. (Mar. 9)

The Endicott House Conference on Medical Education, by Dr. Oliver Cope, Visiting Surgeon, MGH, and Prof. of Surgery, HMS. (Mar. 16)

United Fund

To *The NEWS of MGH:*

February 1, 1966

I would like to express my appreciation to the Professional Staff of the Hospital for their exceptionally generous support of the United Fund. Physician contributions through the MGH reached a record high of $26,002.

The goal set by United Fund headquarters was $25,000. This does not include contributions of staff physicians made through their communities.

Credit for the success of the staff drive is due in large part to the efforts of the 32 staff physicians who voluntarily solicited on behalf of the United Fund, and I should like to express my thanks to them.

Roman W. DeSanctis, MD
Chairman
United Fund Staff Drive

G. M. Balboni, MD

(1879 - 1966)

No physician was more widely beloved among the Italian-American community in Boston's North End than Dr. Gerardo Monari Balboni, and at MGH his dapper smile and lapel carnation were always a source of cheer. He died on January 20, 1966 from heart disease of several years' duration.

Dr. Balboni was born in Cento, Italy. While a medical student at Harvard, he was afflicted with rheumatic fever, in the convalescent phase of which he served for a year as supercargo on a barkentine trading in the West Indies. He returned to school and graduated with the Class of 1905.

Fired with reforming zeal, he dedicated his life to mitigating social as well as medical ills in the North End, which long held the dubious distinction of having the highest per acre density of population in the United States. He labored to reduce the high infant mortality rate there, and directed the Parmenter Street clinic of the Milk and Baby Hygiene Association for many years. He was a member of the boards of the North Bennet Street Industrial School and the Boston Tuberculosis Association. Every North Ender, no matter how poor, knew that he could find a helping hand at 20 Prince Street, where Dr. Balboni had his office.

Early in his career he became distressed at the plight of patients in whom he found pulmonary tuberculosis. The medical treatment then consisted largely of rest in fresh air.

A surgical method of artificial pneumothorax to provide physiological rest for a diseased lung had been reported by Dr. John B. Murphy of Chicago in 1898, but its results were not encouraging. In 1906 Dr. Ludolf Brauer of Marburg, Germany, published his modification of Murphy's method, and later Dr. Samuel Robinson, a young surgeon from MGH, studied it while working under Brauer. Robinson, upon returning to Boston, found his friend Balboni enthusing over a method of artificial pneumothorax which had been reported in 1894 by Professor Carlo Forlanini of the University of Pavia in Italy, but which had attracted little attention elsewhere.

Dr. Balboni wrote later (1935): "Murphy used a trochar, injecting very large amounts of nitrogen [nitrous oxide gas?] and creating a voluminous pneumothorax. . . . Forlanini used the [needle] puncture method, injecting small amounts of nitrogen at frequent intervals and creating a gradual collapse. . . . Forlanini's method is the one universally employed now."

In 1909 Dr. Robinson performed artificial pneumothorax in a tent ward on the Bulfinch lawn at MGH. He used Forlanini's method. In 1910 young Dr. Balboni, though not a surgeon, learned the exact technique from Dr. Robinson and began to treat his private patients in this way. Dr. Balboni even designed a pneumothorax needle. He showed great courage in championing this method at a time when spontaneous pneumothorax was considered invariably fatal. As Dr. Balboni wrote in 1914: "It must be remembered that it is an unusual therapeutic procedure to resort to the creation of a pathological condition in order to cure or relieve another pathological condition."

Dr. Balboni joined the MGH Staff in 1913 as Assistant Physician in the outpatient department. He became Associate Physician in 1928. In 1934 he was primarily responsible for the establishment of the Artificial Pneumothorax Clinic at MGH, the initial funds for which were contributed by a truly impressive number of friends in the North End who were glad thereby to show their appreciation of his work in their community. These friends also helped him establish at MGH the Lillian Dobie Balboni Memorial Fund and at the Massachusetts Eye and Ear Infirmary the Italian Memorial Fund for Cancer of the Throat.

In 1944 he accepted a gubernatorial appointment to the State Board of Registration in Medicine.

Dr. Balboni continued to see patients in the Baker Memorial until fairly recently, although he had officially been retired to the Board of Consultation in 1939 and to the Board of Honorary Physicians in 1950.

He was a close friend of the Right Reverend Henry Knox Sherrill, Bishop of Massachusetts, who for years was chairman of the MGH Board of Trustees. Bishop Sherrill conducted the funeral services for Dr. Balboni.

Photo by Fabian Bachrach

Mr. Stebbins Leaves

Mr. Thomas Stebbins, former director of the medical art department and the School of Medical Illustration, left in December to accept an appointment at the University of Washington, where he is now assistant professor in the division of biological structure and director of the medical illustration department. He had served MGH brilliantly five years as successor to Mrs. Muriel McLatchie Miller, founder of the department and the School.

Mrs. Edith Tagrin, now head of the department, will direct the School until the current students complete their course, which leads to a certificate in medical illustration. No new students are being accepted, the reason being a recent ruling of the Association of Medical Illustrators. Any American school of medical illustration, in order to be approved by AMI after 1968, must be associated with a medical school approved by the Association of American Medical Colleges and must give a course leading to an appropriate degree, preferably on the graduate level. The MGH School of Medical Illustration has no academic affiliation, and at present no university in this area is willing to sponsor such a school.

It should be pointed out here that all the students in the MGH School came already possessing a college degree. Before being admitted, each one had to demonstrate outstanding drawing ability in a variety of art media and a working knowledge of basic biological sciences.

Mrs. Tagrin and her assistant Mr. Paul Andriesse will continue to operate and expand the Medical Art Unit, and there will be no diminution in the MGH tradition of excellence in the visual communication of advances in medical science and care.

A Letter from Shiraz, Iran

To *The NEWS of MGH:*

December 1, 1965

This ancient university town is thought to have had its first teaching hospital endowed and constructed by Adud al-Daula in the latter half of the tenth century, matching the famous *bimarstan* he built in Baghdad. One is reminded of an even earlier tradition of civic excellence by the insignia of Pahlavi University here in Shiraz, deriving from that of nearby Persepolis, summer palace of Darius the Great, and also by the antique wares dating from as early as 500 B.C. to be found in the local stores.

An intellectual continuity from ancient Persia to the present is consistently noted in reports from Western travelers who had command of the language and spoke with scholars in Shiraz down through the centuries. Shiraz is known as the city of saints and poets, and has stubbornly regrown as an intellectual center after each of many waves of conquest.

Pahlavi University, not yet ten years old, is the latest sapling to shoot up from these ageless and vigorous roots. Watered by the Shah, who it appears would like a little healthy competition for the University of Tehran, it has already flowered a medical school and two university hospitals, an engineering school, an agricultural school, and a school of arts and sciences. It is hard to keep track of the sprouts and twigs that integrate the Ministry of Health and the Ministry of Education with this university. Within the past three weeks I have seen two dedication exercises.

This ferment is generated from within by a wonderful discontent with the status quo which seethes in every mind. Unhappily for Iran, this leads brilliant young scholars to fly out of both universities like sparks and land in other countries. Such intellectual pyrotechnics have caused concern in both Iran and the USA, and so at least four American agencies have formed a "bucket brigade." Everyone in both countries will agree that a carefully planned exchange of personnel is the answer. But one has to experience the positive values and negative factors of both countries to see how richly rewarding — or calamitous — an exchange of personnel could be.

Are there advantages to MGH in such exchange? What are the problems, and are there practical, realistic solutions? Advantageous exchange is possible at all levels — teaching and resident staff in both medical and paramedical fields. There is a nurse training school. There is much activity in public health, preventive medicine and social work. While all this will be discussed here from the viewpoint of a surgeon, generalizations can be found which apply to other fields.

University surgeons in the USA have long been concerned by decreasing availability of patients for clinical teaching. The problem in Iran is that there is too much clinical material and too small a resident and teaching staff. They are literally flooded with major surgical problems, and both the overworked teaching staff and the instruction-starved students grow misty-eyed at the thought of being joined regularly by a competent MGH house officer, well along in his training. They hope that this, backed by the planned attendance of a practical American surgeon on their teaching staff, might push their surgical training program up to the level of American Board qualification.

Any MGH staff surgeon who comes here would find himself much in the role of a student and thus go back stronger, for he would encounter surgical problems that are familiar to the Iranian attending staff but quite outside his experience. The possibilities for good clinical research are almost limitless. The medical establishment in Shiraz already has an excellent pathology department, eager to get moving. This department has already started work on Iran's first NIH grant, and is the center of activity for several as yet unsupported projects in clinical research.

If the MGH were to see a disadvantage in accepting an Iranian house officer and a staff man, reassurance on this score is readily gained from personal contact with these people. Iran is a country of brilliant individuals; it had to be in order to survive. Dr. Edward Churchill's ability to discern promise and potential in individuals is widely known, and he chose Iran as the place to start his personal program of international development. As a result MGH has already been introduced to young Iranians in surgery and in other departments. We remember Drs. Farrokh Saidi (1960) and Abdollah Gashgai (1963) as bright, receptive surgical students whose disadvantage in past experience was more than compensated for by their insistence on being taught. The MGH has not made the additional experiment of taking an Iranian on its surgical teaching staff. The success of the first experiment with Saidi and Gashgai calls for this second experiment, so necessary to effect a real exchange.

The language barrier is of course a problem, but not so much on the part of the Iranians, for classes in the Pahlavi Medical School are taught in English, and rounds and teaching sessions are likewise. The American doctor would be handicapped in dealing with Iranian patients who have had little opportunity for education.

One answer to the language barrier is available at Bethesda, where Dr. Robert Farrier and his associates at NIH are experimenting with accelerated teaching of language. If a volunteer is willing to accept enormous stress and a somewhat eerie experience, they are able to give him a 1500 word vocabulary and relative ease in any exotic tongue within five days. So what is there to stop an adventurous and imaginative MGH house officer from undergoing an organized 2 or 4 week briefing which would equip him for a wonderful term of experience in Iran?

International communication is also made possible through the nonpolitical nature of the WHO, and currently American and Middle Eastern university surgeons are making plans on this basis for exchange of information and personnel. Dr. Branstatter, professor of anesthesia at the American University of Beirut, is a member of a WHO review team and is peeking into rooms and asking challenging questions all over the Middle East to see what has happened to the graduates of a WHO course in anesthesia at the University of Copenhagen conducted by Dr. Kirchhoff, a former MGH recruit of Dr. Beecher. Another famous MGH-er, Dr. John Wilson of the American University of Beirut, is getting ready to stage the first meeting of the Middle Eastern Surgical Society, which will greatly facilitate the organization of exchange programs. John was earlier than most of us in catching Dr. Churchill's vision of international surgery.

Dr. Perry Culver generated a turmoil of discussion here in Shiraz last May, and Dr. Charles Janeway's imminent visit here on his way back from India is eagerly awaited by those who deal with pediatric problems.

Iran likewise poses a great and recognized challenge to psychologists, sociologists, and educators, as well as to doctors in this international cultural explosion. Ancient and wise in tradition, Iran is younger than the USA as a land of the striving, independent, freedom-loving, and intellectually discontented individual. We have much to relearn from them, and young Iranians need not envy America as the land of opportunity; all they require is know-how and practical experience. The frontier is here, and "foreign" aid gains us far more than it costs, if it gives us the privilege of sharing in this opportunity.

DR. ROBERT S. SHAW

MGH Authors

HEMORRHAGE AND THROMBOSIS: A Practical Clinical Guide. By Edwin W. Salzman, MD, and Anthony Britten, MB, BCh. Boston: Little, Brown and Company, 1965.

Although some controversial problems in the field of hemostasis have been clarified by recent research, large areas of ignorance persist, and there has been need of a monograph that would enable the busy clinician to apply the latest knowledge of hemostatic pathophysiology to the rational treatment of bleeding disorders. This book by Drs. Salzman and Britten appears to meet the current need.

The international standard numerical classification of coagulation factors is used throughout the book, thereby eliminating much of the confusing nomenclature that has cluttered this field.

Much space in the book is devoted to hemophilia because, as the authors state, "this condition, while eminently amenable to therapy, is still widely mismanaged; it is the commonest congenital disorder of hemostasis and provides a convenient introduction to many principles that are important in other hemorrhagic states."

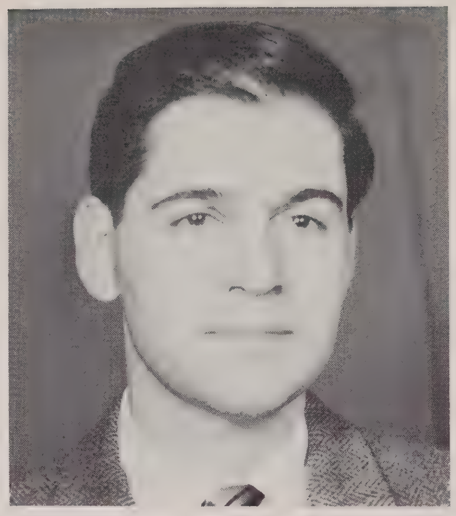
On the other hand, several diseases that have been somewhat neglected in the literature are emphasized in this book. Two examples are acute transient bleeding states and extracorporeal circulation.

Detailed techniques of laboratory procedures are not emphasized, since the book was written primarily for clinicians. However, the authors stress the need for continuous collaboration between the practitioner and the hematological laboratory. They comment: "Specific diagnosis of pathological bleeding is rarely conclusive at the bedside . . . The laboratory must make available the appropriate confirmatory studies but cannot manage the therapeutic program." Thus the responsibility of the clinician in the joint interpretation of the findings and in the selection of therapeutic measures is clear-cut.

Dr. Paul S. Russell, Chief of the Surgical Services, wrote in his foreword to the book: "This volume shows . . . that present knowledge of the events of coagulation can very often be of lifesaving importance when systematically employed, and herein is one of its main strengths. Drs. Salzman and Britten . . . have placed a sharpened weapon in the hands of the practitioner and emphasized the nature of current problems for the researcher. I think time will show that they have done their job well."

Dr. Salzman is an Assistant Surgeon and Assistant Director of the Blood Bank, MGH; and a Clinical Associate in Surgery, HMS.

Dr. Britten is a Clinical and Research Fellow in Hematology, MGH; and a Clinical Assistant, HMS.



(Left) Dr. Salzman and (above) Dr. Britten in his laboratory

Treadwell Library

The two Treadwells, father and son, were distinguished physician-scholars of old Salem. Dr. John D. Treadwell (1768-1833) was an authority on Greek and Hebrew scriptures, and his understanding of law helped him revise the constitution of the Massachusetts Medical Society in 1803. Dr. John G. Treadwell (1805-1856) bought and read nearly every medical book and journal published in English within his lifetime; and when his medical library was acquired by MGH, it contained about 2,500 volumes valued at $3,000. His other books were donated to the Essex Institute, the Essex Agricultural Society, and the Barton Square Church in Salem.

Dr. Hiroshi Hatanaka (below) is shown working under a reactor at MIT which will supply a highly thermalized neutron beam for use in boron-neutron capture therapy. Dr. Hatanaka, a Clinical and Research Fellow in Neurosurgery at MGH, is a Fulbright exchange scholar from the University of Tokyo. Other staff members who work with this reactor include Dr. William Sweet, Dr. Gordon Brownell, and Dr. Albert Soloway.

Photo by John J. Fields

The NEWS of MGH

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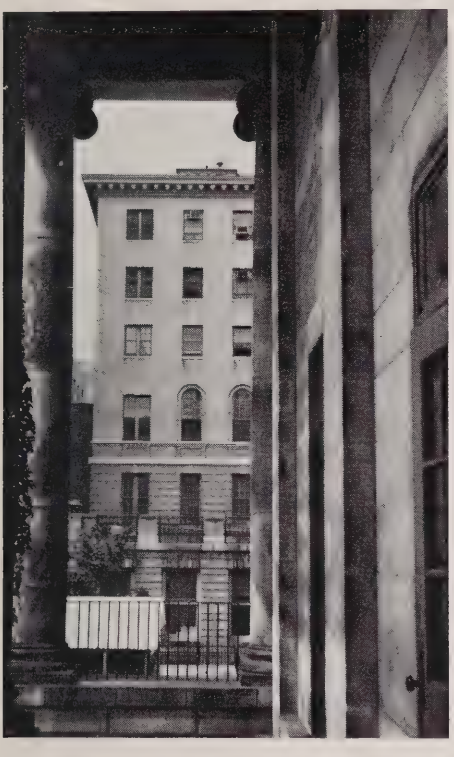

Above: Domestic Building as seen through portico of the Bulfinch Building last summer.
Below: Domestic Building, seen from Blossom Street, in process of demolition last winter to make way for the Surgical and Special Services Building.

Stable Chimerism Is Achieved At MGH Transplant Center

Work in association with the MGH Transplantation Immunology Center has resulted in the successful induction in mice of a state of specific immunological tolerance to skin grafts from genetically nonrelated donors — or, in more picturesque terms, a state of stable chimerism. This notable achievement was reported from the MGH-HMS Department of Surgery on February 14, 1966 in a paper given at the Seventh International Conference on Transplantation in New York by Dr. Anthony P. Monaco, Dr. Paul S. Russell, and Miss Mary L. Wood.

It has long been known that transplants are rejected because cells from the host lymphatic system destroy the grafted tissues. Last October the transplant team reported partial success in maintaining immunological tolerance through a two-step procedure: (1) surgical removal of the thymus from adult recipient mice, followed by (2) a series of injections of an antilymphocyte serum obtained from the blood of rabbits in which a previous series of injections of lymphocytes from mice had been carried out.

The key to complete success, as reported on February 14, was an additional step consisting of a series of intravenous infusions of lymphoid cells taken from the donor mice, followed by transferral of skin grafts from the donor to the genetically dissimilar recipient mice. The results were described as follows:

"Half of the grafts surviving on serum-treated, thymectomized, cell-treated mice at 100 days were in perfect condition, and half showed some evidence of chronic rejection. All animals bearing grafts at 100 days were shown to be chimeras by a standard chimera test (Mitchison), irrespective of the condition of the grafts. Animals with perfect grafts at 100 days tolerated second grafts (from similar donor mice) in perfect condition without evidence of rejection of either first or second graft."

To confirm the specificity of this acquired tolerance, the MGH-HMS investigators took some of the recipient mice with successful grafts and transferred onto them an additional graft from a new group of donor mice whose lymphoid cells were not infused into the recipients. The new grafts were subsequently rejected by the recipients in the usual way and at a normal rate.

This transplantation program is supported by grants from the National Institutes of Health, including a grant for the Transplantation Immunology Center under the direction of Dr. Russell and Dr. K. Frank Austen.

Continued on Page 6

Volpe's Committee Urges Fairer Rates

Governor John Volpe's special committee on hospital costs and charges, appointed about one year ago, has issued a brief preliminary report which in effect endorses the action of John J. McCarthy, Commissioner of Administration and Finance, in certifying more equitable (and therefore higher) welfare reimbursement rates for hospitals in 1966. These rates have been severely criticized by Theodore W. Fabisak, State Director of Hospital Costs and Finances, and by many legislators.

The committee's report follows:

It has become clear from our studies of the past 11 months that one of the most crucial and immediate problems facing our hospitals is that of reimbursement by governmental agencies for welfare patients in the hospitals. In advance of our complete report to you, we therefore submit these recommendations.

It seems incontrovertible that justice and equity demand that society as-

Continued on Page 6

GI Unit Finds Genetic Defect Leading to Isovaleric Acidemia

Clinical alertness on the Children's Service and scientific sleuthing by the Gastrointestinal Unit have resulted in the discovery and first description of a hereditary disorder in which a genetic defect in leucine metabolism produces isovaleric acidemia with neurological symptoms in children. This was reported on April 16, 1966 at the 50th annual meeting of the Federation of American Societies for Experimental Biology at Atlantic City in a paper written by Drs. Kay Tanaka, Matthew Budd, Lewis Holmes, and Kurt Isselbacher.

The young patients showed mild mental retardation and had recurrent episodes of acidosis and coma, much like the picture seen in diabetic acidosis. They had a natural aversion for many dietary proteins such as meats and milk, and indeed the ingestion of these foods would invariably precipitate such episodes.

The clue to the nature of the disorder came from the observation that during these episodes the patients manifested an unusual cheesy odor. Through the use of techniques newly developed in Dr. Isselbacher's laboratory, Dr. Tanaka identified the compound producing the odor as isovaleric acid. The levels of this acid in the blood of these patients were found to exceed the norm by as much as 100 times, and the levels declined as the acidosis and coma diminished.

When the patients were given leucine by mouth, it was possible to reproduce these marked increases of isovaleric acid levels in the blood together with the production of some neurological disturbances, such as difficulty in gait and incoordination. Normally, ingested leucine is metabolized to isovaleric acid, which is then converted into carbon dioxide and water. The accumulation of isovaleric acid in these patients suggested a specific biochemical block in its utilization. The MGH workers subsequently found that the blood cells of these patients showed marked impairment in ability to metabolize isovaleric acid, in comparison with normal cells. Further biochemical studies indicated that the biochemical defect is probably due to the deficiency of an enzyme needed for the conversion of isovaleric acid to β-methylcrotonic acid.

While the cause of the mental retardation and neurological manifestations remain to be determined, it is noteworthy that the administration of leucine to these patients resulted not only in a rise of isovaleric acid but also in some incoordination and tremor. Previous studies have shown that other fatty acids as well as isovaleric acid have deleterious effects on brain function.

This study is being supported by a grant to the Gastrointestinal Unit from The John A. Hartford Foundation of New York.

Dr. Kay Tanaka, a member of the Faculty of Medicine at the University of Tokyo, is presently a Research Fellow in Medicine at MGH.

Dr. Matthew Budd is a Clinical and Research Fellow in Medicine.

Dr. Lewis Holmes is a Clinical and Research Fellow on the Children's Service.

Dr. Kurt Isselbacher, Chief of the Gastrointestinal Unit, has recently been promoted to the grade of Physician on the Medical Services.

The four authors received assistance in this study from Dr. Mary Efron of the Kennedy Memorial Laboratories and Dr. John Crawford of the Children's Medical Service.

Medical Art Awards

Mrs. Edith Tagrin, Director of the MGH Medical Art Unit, received a First Award on April 29, 1966 for her entry entitled "Radical Neck Surgery" in the medical section of the third annual exhibit of the Technical Art Group, Boston Chapter of the Society of Technical Writers and Publishers.

Miss Tehrie Holden, a student in the MGH School of Medical Illustration (Class of 1966), won an Honorable Mention Award for her entry "Pyelonephritis" in the eighth annual competition held by the Student American Medical Association. Her winning entry will be exhibited at the SAMA convention in Los Angeles, May 11-15, and at the AMA convention in Chicago, June 26-30. Miss Holden won a similar award in the SAMA competition last year.

Attention House Staff:

This issue of *The NEWS of MGH* is being mailed in invoice envelopes for the first time. Members of the House Staff (Interns and Residents) are reminded that *The NEWS* is free to them, even though it will reach them in an invoice envelope.

The NEWS of MGH

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Dr. Koch-Weser A Wellcome Scholar

Dr. Jan Koch-Weser, Assistant Professor of Pharmacology at HMS and a member of the MGH Medical Services, has been appointed a Burroughs Wellcome Scholar and will receive through Harvard University a grant of $100,000 in five annual installments, to be used in a comprehensive research and educational program in clinical pharmacology at MGH.

This program will embrace a broad area of human pharmacodynamics, including studies in the absorption, distribution, metabolic fate, and excretion in man of both established and newly introduced therapeutic agents. Since 1959, when he completed his MGH residency, Dr. Koch-Weser has been engaged in developing a program for detecting, recording, and evaluating adverse reactions to drug therapy, and seeking correlations between reactions to specific drugs and the age, sex, race, and underlying disease of the patients involved.

Dr. Alexander Leaf, Chief of the Medical Services, comments: "Because of Dr. Koch-Weser's research and clinical interest and experience in the cardiovascular field, emphasis will be given, at least initially, to studies in this area."

The Burroughs Wellcome Fund is a nonprofit fund established by Burroughs Wellcome & Company (USA), Inc., pharmaceutical manufacturer, to provide financial aid for "the advancement of medical knowledge, research, or other scientific and scholarly purposes."

The educational program to be supported by this grant at MGH will be carried out at both undergraduate and postdoctoral levels.

Dr. Farahe Maloof Becomes New Head Of Thyroid Unit

A change in leadership of the Thyroid Unit occurred on April 1, 1966. It was announced as follows by Dr. Alexander Leaf, Chief of the Medical Services:

"Dr. John B. Stanbury is leaving the MGH to become Professor and head of the Metabolic Research Unit at MIT. He has graced our hospital with distinction as Chief of the Thyroid Unit for a number of years, and all of us viewed his departure with reluctance but are happy that he will continue to participate in the hospital's activities as a member of our Board of Consultation. We all wish him the very best in his new position.

"To fill the vacancy created by Dr. Stanbury's decision to accept the professorship at MIT, Dr. Farahe Maloof, an old friend of the hospital's Medical Service and the Thyroid Unit, has accepted the position as head of the Thyroid Unit, and we are most pleased to announce his appointment. He will be a strong replacement for Dr. Stanbury, and I expect a continued distinguished record of accomplishments from this unit in my department."

By MGH Medical Photography Unit

Site of the future Surgical and Special Services Building

Dr. Stanbury, a graduate of HMS in 1939, began his MGH career as an intern in 1940. After wartime service as a lieutenant commander in the navy, he launched into an MGH residency, which he completed in 1948 as Chief Resident in Medicine. Then he became principal investigator in thyroidology at MGH and head of the activities that in 1961 were designated as the J. Howard Means Metabolic Research Laboratories. In recent years Dr. Stanbury has become intensely involved in seeking to define the metabolic defects in various types of goiters, both endemic and sporadic.

Dr. Maloof graduated from Tufts Medical School in 1945, and interned at the U. S. Naval Hospital at St. Albans, Long Island, New York. From 1946 to 1948 he was stationed at several naval medical hospitals in New England. He began his MGH career as a Clinical Fellow in Medicine in July 1948, as a member of the Thyroid Clinic. In 1952-53 he was an Asistant Resident in Medicine at MGH, after which he resumed his work in the Thyroid Clinic under the administration of Dr. Stanbury.

Initially his studies were concerned with the biological effects of I-131 irradiation in thyroid tissue, and in collaboration with Dr. Earle Chapman he took on the task of following up MGH patients who had been given radioactive iodine for the treatment of various thyroid diseases.

In 1959 he was given the opportunity to continue his laboratory studies with regard to the thyroid gland in the Department of Biochemistry at Brandeis University. There, in collaboration with Dr. Morris Soodak, a former member of the MGH Arthritis Unit, he has been conducting experiments in thyroid biochemistry and pharmacology. He regards this experience as an extremely rewarding one, and plans to maintain close association with Dr. Soodak.

A group of former MGH workers now in the Department of Biochemistry at Brandeis have helped bring about the present strong relationship between that university and the MGH. Dr. Nathan Kaplan, chairman of that department, formerly worked with Dr. Fritz Lipmann when the latter was head of the MGH Biochemical Research Laboratory. Others in this group are Drs. William Jencks, Mary Ellen Jones, William Loomis, and as mentioned before, Morris Soodak.

Dr. Stanbury's move to MIT calls to mind the fruitful collaboration between that institution and the MGH, which began in 1937 when Dr. Saul Hertz obtained radioactive iodine from MIT for use in thyroid research at MGH. This was probably the first use of any artificially produced radioactive isotope in medicine.

President Karl Compton and Professor Robley Evans of the MIT Department of Physics then set up a joint MIT-MGH research program, with Arthur Roberts as its full-time physicist. In 1950, when Dr. J. Howard Means set up the MGH Physics Research Laboratory within the Department of Medicine, he asked Professor Evans to recommend the best available MIT man to head this unit, and so Dr. Gordon Brownell came to MGH. Subsequently, Dr. Brownell's laboratory became deeply involved in the work of various departments, particularly the Thyroid Unit, Neurosurgery, and Radiology. This in turn led to elaborate and flourishing interdigitation between MGH and MIT, and many men have appointments in both institutions.

Dr. Compton served on the MGH Scientific Advisory Committee from its formation in 1947 until his death, and Professor Francis Schmitt of the MIT Department of Biology is still a member of the MGH Board of Trustees.

Second Letter on Shiraz

April 5, 1966

To *The NEWS of MGH*:

I was pleased to read in your January-February 1966 issue an imaginative account by Dr. Robert Shaw of medical education in Shiraz, where I spent two satisfying academic years, 1958-1960. Last December I landed in Shiraz a few days after Dr. Shaw had left, to discuss the feasibility of a nutrition research project.

One of the essential ingredients of medical education (as opposed to medical training) — a research environment — is gradually being developed in the Pahlevi University Medical Center in Shiraz. It is unfortunate that the spirit of inquiry emanating from research had not been more greatly nurtured, nor encouraged there in the past. The opportunities are vast. It was a mistake to have assumed that there was too much to do in taking care of patients to think about research.

Now, as Dr. Shaw notes, Iran's first NIH grant (for an investigation of pneumocystis carinii) has come to Shiraz. However, other seeds of research had been planted before. Among the first serious workers on G6PD deficiency were Drs. James E. Bowman and Deryck G. Walker, visiting professors of pathology and biochemistry, respectively, in Shiraz. Dr. Bowman is now at the University of Chicago and Dr. Walker in the department of biochemistry in Birmingham, England.

A clinical description of an unusual syndrome consisting of dwarfism, hypogonadism, severe iron deficiency anemia, and geophagia was reported from Shiraz in 1960. One of the coauthors, A. S. Prasad, subsequently worked at NAMRU-3 in Cairo where his studies suggested that this syndrome may be the result of iron and zinc deficiency, the latter being responsible for the endocrinopathies because similar findings are noted in animals with experimentally induced zinc deficiency. In Iran, it is thought that the syndrome might be caused by the predominantly wheat diet of the villagers. Wheat contains a lot of phytase (inositol hexaphosphate), which has been shown in rats to make zinc, and probably iron, unavailable to the organism. If this can be confirmed by a "double blind" therapeutic study to see if zinc alone makes the patients with growth and gonadal deficiencies grow, it will be significant confirmation that zinc deficiency may occur in man. This had not previously been thought possible because of the ubiquitous nature of zinc.

Fortunately, support has recently been made available to conduct a long-range nutrition study based in Shiraz. The first objective will be an investigation of this syndrome to prove or disprove the theory that zinc deficiency is the cause of it. If this proves to be the case, it will open up many avenues of study of growth and development, as well as other aspects of nutrition, endocrinology and metabolism.

It is greatly to be hoped that the research work now getting under way will provide the "missing ingredient" for complete medical education, and that Iranians will take the lead in studying the vast number of medical problems peculiar to the region which cry for solution, and which offer such golden opportunities for scientific endeavor and scholarship. The academic environment should be enhanced by the research programs being developed at Pahlevi University. This should aid in attracting leading, well educated Iranian physicians who are completing their graduate education abroad, to return. It should also be a step in the direction of developing medical leadership in all branches of medicine — not only in academe but also in public health and preventive medicine, the planning of medical care, and in administrative medicine.

James A. Halsted, M.D.

Dr. Halsted is Associate Chief of Staff for Research and Education at the Veterans Administration Hospital in Washington, D. C. He was an MGH House Officer (1930–32) and a member of the MGH Medical Services (1934–36, 1941–47).

Walter Bauer Fund

A Walter Bauer Scholarship Fund for students at the Harvard Medical School has been made possible by a gift of $50,000 from the Helen Hay Whitney Foundation of New York. When Dr. Bauer died in 1963 he was Jackson Professor of Clinical Medicine at HMS and Chief of the Medical Services at MGH. He was also vice president of the Board of Trustees of the Foundation and chairman of its Scientific Advisory Committee.

The Trustees of the Foundation desire that the scholarships be given to students who "best exemplify the sterling qualities of character and personality that made Dr. Bauer so widely beloved and admired" by his own students.

Treadwell Library

At the meeting for organizing the Association of Medical Librarians (now Medical Library Association, Inc.), held in the editorial offices of the *Philadelphia Medical Journal* on May 2, 1898, Dr. George M. Gould, editor of that journal, spoke to the small group of librarians who had responded to the "call" for a meeting concerning "The Work of an Association of Medical Librarians."

The first of the objectives of such an association, Dr. Gould said, should be "the systematization and practical carrying out of a method to effect the exchange of duplicate books whereby such volumes not needed by one library may by exchange or purchase find their way to the library heretofore without them. To the committee undertaking this work I can perhaps give some hints of practical value. Every library has or will have large numbers of such duplicates, and it only needs a little intelligence and zeal to systematize a most useful machinery of exchange." (*Medical Libraries, 1: 15–19,* May 1898)

Thus was launched the exchange program in which institutional members of the Medical Library Association may participate. In the succeeding 67 years the number of items exchanged has grown from a very few to over 200,000 a year.

During these years the Treadwell Library has been an active member of the exchange program, having submitted duplicate and want lists as early as 1899 and as recently as August 1965. During 1965, 38 bound and 1,148 unbound journals were sent to some 278 medical libraries throughout the world. This is an activity from which the staff of the Treadwell Library derives a great deal of satisfaction, since the duplicates which are of no use to it are sent to libraries that have need of them. Also, the Library has been able to complete volumes of its journals by requesting and receiving items from other libraries.

In addition to institutional membership dues, the Treadwell Library refunds the postage required to mail any items received. In this manner it has been possible to complete files of periodicals at very little cost, although the time consumed in carrying out this program is considerable.

The Treadwell Library also participates in the United States Book Exchange. There is a small membership fee, and it is necessary to pay a small amount for each item received. However, it has been possible to purchase

Photo by John J. Fields

The Ether Dome on the Bulfinch Building

some rare items at very little cost. Also, any periodicals not requested by libraries in the Medical Library Association are sent to the United States Book Exchange, so that it is possible to keep the number of duplicates held in the Library to a minimum.

Information about these two exchange programs has been given here so that those members of the MGH Staff who have generously contributed journals to the Treadwell Library might know that copies not required to complete our own collections, eventually find their way to some other library in need of them.

GENEVIEVE COLE
Librarian

Miss Carrie L. Williams (1876-1966), Librarian Emerita, died on April 29. She became Librarian on January 1, 1925, succeeding Mrs. Grace W. Myers, and was retired on October 31, 1941. She was also Record Librarian of MGH until 1927, when a separate department of medical records was established by Mrs. Genevieve Chase.

One of her early accomplishments was converting the MGH book classification from the Dewey decimal system to the more flexible Boston Medical Library system.

Chair Endowed by Ella Cabot Trust

A Richard Clarke Cabot Professorship of Social Ethics at Harvard University has been endowed by the Ella Lyman Cabot Trust, Inc. This trust was created under the terms of the will of Dr. Cabot (1868-1939) in order to foster the work of individuals who show exceptional promise of making significant contributions to humanity. It was named for Mrs. Cabot, who died in 1934.

Dr. Cabot was Professor of Clinical Medicine at HMS until 1920, when he resigned from the Faculty of Medicine to become Professor of Social Ethics at the University. At MGH he was Chief of the West Medical Service likewise until 1920. He established medical social service in 1905 at MGH, and introduced the CPC method of clinical teaching about 1910. He taught social ethics by the case method, through studies in human relations and biography. He wrote nine books on social ethics and became president of the National Council of Social Work in 1931.

In announcing the new professorship, President Nathan M. Pusey of Harvard remarked: "We welcome the formal reappearance of Social Ethics in a community which owes much to the dedication and example of Richard Clarke Cabot and, before him, Francis Greenwood Peabody. In a time of widespread confusion about moral issues, there is also in our day a resurgence of concern for human and ethical values, especially for character and for moral sensibility. The Richard Clarke Cabot Professorship will provide a focus for that moral awareness and moral responsibility which has always been at the base of Harvard's whole enterprise."

Dr. Paul Dudley White, a member of the Cabot Trust, commented: "The Richard Clarke Cabot Professor should deal with problems of practical ethics, should help students face ethical questions frankly and openly, and should help them relate themselves thoughtfully to the social issues of the day, so that they may at least envisage the possibility of careers in either social or public service.

"Such a man is bound to be interested in younger students in college as well as older graduate students. A man in this post might also extend his teaching and research into the professional concerns of medicine, education, law, and the other graduate schools."

Wide World Photos, Inc.

Dr. Monaco eyes a very important mouse with a skin graft (dark area) transferred more than one year previously from a genetically nonrelated donor mouse. On the other side of the mouse is another successful graft (not shown) taken 150 days previously.

Stable Chimerism . . .

Continued from Page 1

Dr. Paul S. Russell is Chief of the General Surgical Services, MGH, and John Homans Professor of Surgery, HMS.

Dr. Anthony P. Monaco is an Assistant in Surgery, MGH, and an Instructor in Surgery, HMS.

Miss Mary L. Wood is a Senior Laboratory Technician, MGH.

Volpe's Committee . . .

Continued from Page 1

sume responsibility for the full cost of caring for the hospitalized welfare and other patients for whom it has a financial obligation. It is manifestly unjust to have any portion of this burden fall upon either individual hospitals or private paying patients. The establishment of Medicare by the Congress of the United States demonstrates that the maintenance of health is a public function and responsibility.

The Committee's broad and inclusive studies of the problems of welfare reimbursement have led to the unmistakable conclusion that the hospitals in Massachusetts have not received adequate payment for the care of welfare patients. As a result, the burden of this deficiency has not fallen on the Commonwealth where it justly belongs and has instead become the unjust burden of the private paying patients and the hospitals.

Moreover, with similar unfairness, reimbursement has not been based on present costs but on costs that were 27 months old. This has been a further hardship on the hospitals in this period of rising costs. No individual nor business could long survive on this basis.

The Committee further concludes from its studies that the arbitrary and involved mathematical method of establishing unrealistic accommodation costs for welfare patients results in a still further loss to the hospitals.

The Committee therefore recommends that at the earliest possible time: the time lag in determination of welfare reimbursement rates to the hospitals by the Commonwealth be eliminated; the hospitals hereafter be reimbursed on a current basis; their reimbursement be for actual costs or normal charges, whichever is lower; the hospitals be urged to adopt a uniform system of accounting well suited to determining their actual costs; The Commissioner of Administration, through the Bureau of Hospital Costs, institute an organized program by which the hospitals can reduce the mounting costs for their services.

Should legislation be necessary to accomplish these ends, we recommend its immediate preparation and urge the promptest possible enactment by the legislature to relieve existing inequities.

This report was signed by the following members of the special committee: Robert A. Waters, chairman; Louis E. Newman, Harvey B. Leggee, Joseph Gannon, Donald Stahl, Henry Gomperts, and Joseph Salerno. (*One member, Charles J. Lewin, died last December.*)

McCarthy's Rates Ruled Valid by Attorney General

The hospital reimbursement rates certified on February 3, 1966, by John J. McCarthy, State Commissioner of Administration and Finance, were declared legally valid by Attorney General Edward W. Brooke on March 22. The certified rates had been challenged by public welfare agencies and by the State Senate. The Attorney General's ruling was contained in a letter to Commissioner McCarthy dated March 22, 1966. Portions of this letter are quoted below:

Dear Commissioner McCarthy:

On March 4, 1966, you submitted to me a request for my opinion upon five questions relating to the setting of rates for reimbursement of hospitals . . . for care of welfare patients under the provisions of General Laws, chapter 7, section 30K. . . .

On February 10, 1966, the Senate of the Commonwealth adopted an Order requesting an opinion of the Attorney General with respect to the rates certified the previous week. The Order of the Senate contained the following statement of fact:

". . . it also appears that the Director of Hospital Costs and Finances has not certified to said Commissioner (of Administration) the costs and charges which in accordance with said section 30K it is provided should be so certified, but in lieu thereof, and by order of said Commissioner, by letter to said Director dated January 7, 1966, filed with the Commissioner projected or estimated ward costs and charges for the year commencing January 1, 1966." . . .

I advised the Senate that the Director of Hospital Costs and Finances could not lawfully project costs and charges for the year 1966, and that rates established by the Commissioner of Administration on the basis of such

Continued on next page

projected figures were invalid. . . . You have now indicated that the Senate's "characterization and interpretation of the figures presented . . . by the Director . . . does not coincide" with your own. You advise me that — prior to your certification of rates on February 3, 1966 — the Director of Hospital Costs and Finances had provided you not only with projected and estimated figures for the year 1966 (as stated by the Senate), but also with figures which reflected actual hospital costs and charges. . . . You state that you have treated the Director's communications as certifications of the costs and charges called for by chapter 7, section 30K, and I will not examine this contention. . . .

Assuming that such proper certification has been made . . . it is clear that the rates promulgated by you on February 3, 1966 have been properly established. . . . I see nothing in the statute which would prohibit the Director from providing additional information . . . Whether such additional information happens to be figures with respect to related subjects, or projections as to future costs and charges, or something else, its existence would not affect rate-setting actions subsequently taken by the Commissioner. . . .

It is a practical fact that the Director of Hospital Costs and Finances cannot possibly hope to provide cost and charge figures which are applicable to the exact day upon which rates are to be promulgated. . . . Probably the Director can at best certify costs and charges from a period somewhat earlier than the present. It would be beyond the scope of this opinion to speculate upon how long such a "time-lag" should be. . . .

I believe that . . . the Commissioner of Administration possesses the authority to take this inevitable "time-lag" into consideration. . . . It is my opinion that the Commissioner may — in his discretion — take the figures provided by the Director and update them. This may be done by estimating what increases in hospital costs and charges may have taken place during the period between the date of the Director's figures and the present. . . .

I find nothing in the statute which would prevent the Commissioner from employing such projections, assuming that they are reasonable and that they are based upon the figures made available by the Director. Chapter 7, section 30K in fact appears to contemplate such action by the Commissioner, since it vests final authority to establish rates in his office rather than in the office of the Director. . . . The question arises whether facts and figures so recent that they could not be certified by the Director will meet the criterion of reliability. This however is a determination which must be made by the Commissioner upon all of the facts which are at his disposal. . . .

This [opinion] in no way conflicts with my opinion rendered to the Senate on February 16, 1966. At that time, I indicated only that the Director of Hospital Costs and Finances could not substitute such projection and estimation for actual concrete figures. . . . The two opinions are complementary, dealing with two separate factual situations. I make no comment upon which set of facts presented to me — that of the Senate or that of the Commissioner of Administration— may be the more accurate. My opinion of February 16, 1966 is applicable should the facts be as presented by the Senate; the above responses apply to the facts described in the present request.

Lyla P. Flynn (left) and Anna R. McLaughlin, photographed before they retired. Miss McLaughlin was secretary to Dr. John Knowles, General Director; Mrs. Flynn was secretary to Dr. Charles Clay, Assistant Director. Both ladies were MGH employees for 40 years.

Dr. Earle W. Wilkins, Jr., head of the MGH Emergency Ward, was one of 25 former college athletes who received a Silver Anniversary All-America Award from *Sports Illustrated* in recognition of exceptional achievement during 25 years following graduation. Dr. Wilkins was nominated for this honor by Williams College, where as a member of the Class of 1941 he starred in three sports and was elected to Phi Beta Kappa. Recently he returned from a Fulbright Fellowship and visiting surgical professorship in Vienna.

Volunteers' Course Open to Applicants

The annual MGH course for directors of hospital volunteer services will be given from September 26 through October 21, 1966, by members of the MGH Staff under the direction of Mary Ruth Wolf, Director of the Volunteer Department.

Thorough instruction is given in the complexities of hospital organization and management and the place of the volunteer department in the total hospital structure. Special emphasis is placed on the executive responsibilities of the director of volunteer services. The course is conducted by lectures, observation, participation in selected volunteer activities, and field trips to other hospitals of varying size and category.

This unique course was established in 1961 and has attracted enrollees from not only Greater Boston but also faraway places. Last year two of them came from South America.

Acceptance of applications will be made in the order in which they are received by Miss Wolf.

Social Events

The annual spring tea for international visitors at MGH was held on April 13 in the Walcott House. The co-chairmen of the Service League committee in charge of this colorful event were Mrs. H. Peter Mueller and Mrs. Anthony Monaco.

The annual spring dance for the Professional Staff took place at the Harvard Club of Boston on April 30, the eve of May Day, the music being furnished by Ruby Newman's Orchestra. The chairmen of the joint committee were Mrs. Marshall Bartlett of the Service League and Mrs. Robert Cantu of the Distaff Club.

The annual spring dance for the MGH family was held on May 12 at the Sheraton Plaza Ballroom under the spell of Ruby Newman's Orchestra. The co-chairmen of the committee were Malcolm McLean and Tony Giarrusso of the Maintenance Department.

The annual picnic for international visitors and their children will again be held on Memorial Day at the estate of Dr. and Mrs. Bradford Cannon in Lincoln. Mrs. Edwin Cole of Lincoln is in charge of arrangements, and will be assisted by members of the Service League and Distaff Club. A good time for all is assured.

MGH Pops

The MGH family will move en masse to Symphony Hall on Wednesday evening, June 1, for a gala occasion — MGH Night at the Boston Pops. It is expected to be as successful as the one held last year, when the entire block of tickets for one half of the floor was sold out within ten days (the other half of the floor being reserved for the John Hancock Life Insurance Company). This year the entire floor is reserved for the MGH.

Mrs. John Raker of the MGH Service League is chairman of the committee on arrangements. The committee includes Mrs. H. Lawrence Whittemore, Jr., of the Ladies Visiting Committee, Mrs. H. Dunster Howe of the Service League, Mrs. H. Bryan Brewer, Jr., of the Distaff Club, and representatives of most of the major hospital departments. Mrs. Otto Aufranc designed the flyer that was recently mailed out to the MGH family, together with applications for ticket reservations.

A memorable MGH Night at the Pops was held on May 25, 1937, when the feature of the program was the MGH Student Nurses Glee Club, directed by Miss Dorothy Smith of the Class of 1936. The conductor on that occasion was Arthur Fiedler.

Vincent Show

The Vincent Club presented its 74th annual benefit show at New England Life Hall from April 12 through April 16. Entitled *Think Twice,* it was an original musical comedy written by Constance Dupee and Mrs. Mills Duryea of the Club, staged and choreographed by Craig Atkinson, and directed by Michael Douglas. All roles were acted by Vincent ladies — several of whom played tough guys and hoods.

The plot concerned a mid-Western talent contest, a horse race, and sundry complications in New York, all leading into numerous song and dance numbers, the music and lyrics of which were written by talented Club members. As usual, Ruby Newman's orchestra provided the music.

The traditional high-stepping Vincent Drill, performed by 16 girls in gold costumes with crimson capes and plumes, was the colorful highlight.

Last year, the Vincent Show (*Hello World*) earned the sum of $47,000, which was donated to the Vincent Memorial Hospital at the MGH, bringing the grand total over a 73 year period to $1,436,630.

A Forgotten Man?

Dr. George E. Gifford, Jr., a psychiatrist on the staff of the Peter Bent Brigham Hospital, has written an interesting and accurate article on Dr. Augustus Addison Gould (1805-1868) and the decisive part he played in the historic ether episode at MGH. The article appeared in the Christmas 1965 issue of the *Harvard Medical Alumni Bulletin* and was entitled "The Forgotten Man of the Ether Controversy."

Photo by Judson

MGH Student Nurses Glee Club at the Pops, May 25, 1937

The NEWS of MGH

Vol. 25, No. 3 Boston, Massachusetts September-October 1966

Detail from photo by Bradford Washburn (1956)

Massachusetts Eye and Ear Infirmary

MGH and Eye & Ear Infirmary Set Up Joint Policy Committee

The MGH and the Massachusetts Eye and Ear Infirmary moved even closer than hitherto toward effective cooperation when last June the governing boards of both institutions unanimously adopted a six-point proposal which sets up a mechanism for joint action on matters of mutual interest pertaining to patient care.

A Joint Medical Policy Committee has been formed to meet monthly and submit advisory reports and recommendations to both governing boards. The initial membership of the Joint Committee includes:

Dr. John H. Knowles, chairman; Mr. Charles T. Wood, secretary and drafter of agenda; Dr. David G. Cogan, Dr. Carl C. Johnson, Dr. Robert D. Reinecke; Dr. Harold F. Schuknecht, Dr. William W. Montgomery; Dr. Alexander Leaf, Dr. Paul S. Russell, and Dr. Nathan B. Talbot.

One major subject being studied by the Joint Committee is a low-rise wing that the Infirmary wants to build on the site of its present Gardner Building. The proposed wing would be utilized by both the ophthalmological and the otolaryngological services, and a typical floor would accommodate about 40 beds for patient care and provide from 6,000 to 8,000 square feet for research facilities. The main entrance would face north toward the John R. Macomber Quadrangle, and glass corridors would communicate with the Phillips House, the Vincent-Burnham Memorial Building, and the White Memorial Building.

Another subject for mutual study is the future disposition of the adjoining Suffolk County Jail, once that 115-year-old structure is closed and made available to both the MGH and the Infirmary.

Joint operation and proportionate financing of radiotherapeutic facilities are now being undertaken. Joint and uniform personnel policies in appropriate areas are being worked out through joint administrative communication and action.

Relations between the two institutions have been cordial ever since the Infirmary was incorporated in 1827. Dr. Edward Reynolds, a cofounder of the Infirmary, was a pupil and close friend of Dr. John C. Warren, a cofounder of the MGH. After several moves, the Infirmary settled in its present location in 1898, when Dr. J. Collins Warren was President of the Board of Managers of the Infirmary.

From 1915 until 1949 the directorships of both institutions were filled jointly by three individuals in succession (Drs. Washburn, Bigelow and Faxon). When Dr. Nathaniel Faxon retired in 1949, the two hospitals reverted to the policy of having separate directors, with Mr. Francis S. Hill filling the MEEI position. When the latter retired on December 31, 1965, Mr. Charles T. Wood was elected to fill his place.

In 1920 the professional staff of the Infirmary became ex officio members of the MGH staff, which in turn acts as consultants to the Infirmary. When the Connecting Building was built in 1927, outpatient departments were set up therein under the joint administration of both hospitals.

Concerning future MGH-Infirmary

Fabian Bachrach

Charles T. Wood, Director

Continued on Page 8

Per Diem Inpatient Costs at MGH

ROUTINE COSTS:	1964	1965
Maintenance, building and laundry services; administrative and business offices, etc. — comparable to hotel costs	5.80	6.36
Meals and special diets	4.85	5.13
General nursing services	11.10	11.89
Student nursing services	2.26	2.43
House officer services	2.48	2.52
Depreciation of plant	.45	.45
Other routine costs	4.05	4.59
	$30.99	$33.37
ANCILLARY COSTS:		
Operating room	5.54	6.24
Anesthesia	2.47	2.67
Radiological diagnosis and treatment	2.90	3.57
Laboratory and pathology services	5.26	6.03
Electrocardiograms	.31	.34
Physical therapy	.41	.50
Medical supplies	.65	.66
Drugs	1.57	1.75
	$19.11	$21.76
ROUTINE AND ANCILLARY COSTS	$50.10	$55.13

Dr. Rabkin Becomes Director at BIH

The MGH Medical Services are proving to be a wellspring of hospital directors. Within the past four years, four of its members have been appointed general directors of teaching hospitals associated with the Harvard Medical School: **Dr. John H. Knowles** at this hospital (1962), **Dr. Leonard W. Cronkhite, Jr.,** at the Children's Hospital Medical Center (1962), **Dr. John G. Freymann** at the Boston Hospital for Women (1965), and now **Dr. Mitchell T. Rabkin** at the Beth Israel Hospital (July 1, 1966).

Dr. Rabkin became an intern at MGH in 1955, following graduation from HMS. After two years at the National Institute of Arthritis and Metabolic Diseases, he returned to MGH and advanced to the chief residency in medicine. In 1963 he joined the Active Staff and subsequently became acting chief of the Endocrine Unit. At Harvard he is an associate in medicine. His predecessor at the Beth Israel was Dr. Sidney S. Lee, who on July 1, 1966 became Associate Dean for Hospital Programs at HMS.

On October 1, Dr. Rabkin imported **Dr. Edwin W. Salzman** of MGH to assume the post of associate director of the surgical service at BIH. As assistant director of the MGH Blood Bank for several years, Dr. Salzman conducted what Dr. Rabkin calls "a brilliant research effort on problems of bleeding and clotting." A book by Dr. Salzman and his associate Dr. Anthony Britten, *Hemorrhage and Thrombosis,* was reviewed in the January 1966 issue of *The NEWS of MGH.*

The NEWS of MGH

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Lawrence E. Martin

Comptroller Martin Given AAHA Award

Mr. Lawrence E. Martin, Associate Director and Comptroller of MGH, received the annual Frederick C. Morgan Individual Achievement Award of the American Association of Hospital Accountants at its 20th anniversary banquet last June at the University of Chicago. This award acknowledged Mr. Martin's "significant contributions to the field of hospital accounting and financial management."

Mr. Martin earned the master's degree in business administration at Boston University. He came to the MGH in 1949 as a cost accountant, and within two years was appointed Comptroller. He has been chairman of several committees of the Massachusetts Hospital Association, including its Council of Blue Cross Affairs, and has participated in the development of a cost manual published by that association.

Mr. Martin was president of the Massachusetts chapter of the American Association of Hospital Accountants in 1962-63, and became a Fellow of the AAHA in 1962. He received the William G. Follmer Merit Award for chapter activity in 1964.

Mr. Martin has been in charge of setting up the Medicare and Medicaid programs at MGH, and has been Dr. John Knowles's chief lieutenant in the hard-hitting campaign for equitable hospital reimbursement rates both at MGH and in the state. Every member of the Staff can participate in this campaign by explaining the essentials of hospital costs and charges to patients. They are entitled to know.

Elliot Richardson Drafts State Plan For Medicaid Area

Lieutenant Governor Elliot L. Richardson, a former member of the MGH Board of Trustees, has been the chief architect of the Massachusetts Medicaid plan (Title 19), approved on October 18, 1966 by the U. S. Department of Health, Education, and Welfare. In 1965 Governor John E. Volpe had delegated to Lt. Gov. Richardson the primary responsibility for designing and coordinating multidepartmental state programs in the field of health, education, and welfare.

Under the approved plan the Department of Public Welfare will administer the Medicaid programs, and the Department of Public Health will be responsible for the quality, efficacy, and utilization of these programs. Any unresolved differences of opinion between these two departments will be referred to the Medicaid Advisory Council for decision.

Lt. Gov. Richardson has earned a national reputation as an expert in HEW legislation. He was Assistant Secretary for Legislation in the U. S. Department of Health, Education, and Welfare from 1957 to 1959, and on occasion was Acting Secretary of the Department. He was U. S. Attorney for Massachusetts from 1959 to 1961. In 1963 he was general chairman of the Greater Boston United Fund campaign. Upon being elected to his present public office, it was necessary for him to resign from the MGH Board of Trustees, whereupon he was elected to the MGH Corporation.

Lt. Gov. Richardson headed the large task force which drafted bipartisan legislation to set up a state program of 37 regional mental health centers, each center to be governed by a blue ribbon board of citizens, and the entire program to be supported by federal matching funds. Unfortuately, this bill (S.889) was killed during the "flurry of inaction" (to quote the *Boston Globe*) in the final drive for prorogation of the Legislature.

In a related area, Lt. Gov. Richardson drafted the Community Services Act, which was introduced in both branches of Congress last May. This legislation, if passed, would put the federal government in partnership with the states in setting up multiservice community centers. In this connection he promoted the establishment of the demonstration multiservice center in Brockton, Massachusetts, where citizens in need of assistance may find health, welfare, and rehabilitation agencies under one roof.

One proposal made by Lt. Gov. Richardson merits more consideration than it has received. On August 20 he issued a comprehensive statement on the proposed state Medicaid plan, two days before the opening of joint legislative hearings on that subject. His statement included a plea for the establishment of a new state department of health and welfare which would consolidate seven existing agencies: the Department of Public Health, the Department of Public Welfare, the Department of Mental Health, the Massachusetts Rehabilitation Commission, the Division of the Blind, the Massachusetts Commission on Aging, and the Commonwealth Service Corps.

Lt. Gov. Elliot L. Richardson

Such an all-inclusive agency is necessary, the Lieutenant Governor believes, in order for the state to administer effectively its multiservice health and welfare program. "With our present system of several hundred scattered and fragmented municipal public health and public welfare agencies, this challenge is going to be exceedingly difficult for Massachusetts to meet."

He added: "A single administrator backed up by a small but highly competent staff and guided by a broadly based advisory commission would have the necessary tools to assure better planning, better coordination, better communication, and more economical administration than is now possible."

He pointed out "a radically new kind of responsibility" incumbent upon state departments of health. "Whereas in the past they have largely been preoccupied by environmental and preventive health problems, they must now go about the complex task of forming 'coalitions of resources' among public and private agencies."

Lt. Gov. Richardson's statement also referred to hospital reimbursement rates: "Will the Commonwealth, under Title 19 [Medicaid], be forced to pay the same rates for hospital care as are paid by the federal government under Medicare [Title 18]? Quite clearly the answer should be affirmative, and if that is the final answer, the whole controversy over hospital rates which has recently agitated the special Senate committee to study hospital costs and charges will be blown right out the window."

His statement included a summary of the state Medicare program, which began last July 1: "In the case of Medicare, our success has been substantial. In numbers of certified hospital beds, nursing home beds, and in percentage of the population covered by certified home health services, we are far above the national average — over 99 per cent of our hospital beds, an estimated 40 per cent of our nursing home beds, and, in the case of home health services, 98 per cent of our population are covered. And with respect to participation of the elderly in the optional medical benefits program, cooperation between the Department of Public Welfare and the Social Security Administration has brought Massachusetts to the very top among the 50 states. Effective leadership by the Department of Public Health, meanwhile, enabled our hospitals, nursing homes, and home health services to get the program off to a smooth start last July 1."

Although not a doctor himself, Lt. Gov. Richardson's participation in state health planning and in MGH affairs have given him an unusual opportunity to carry on the medical tradition of his family. His brothers Edward and George are active members of the MGH Staff; his father Edward was Chief of the West Surgical Service at MGH; and his grandfather Maurice held the title of Surgeon-in-Chief at the MGH.

Ether Day, 1966

The MGH observed Ether Day 1966 by awarding its Service Pin to 270 members of the hospital family for loyal service ranging up to 40 years. Mr. Phillips Ketchum, Honorary President and Trustee of MGH, delivered greetings to the numerous guests in the Moseley Auditorium. The principal speaker was Dr. John H. Knowles, General Director, his subject being "The MGH and Medicare." During the pin ceremony Dr. Ellsworth T. Neumann, Administrator, presented the candidates to Dr. Knowles.

G. M. Kober Medal Awarded to Dr. Aub

Dr. Joseph C. Aub, former director of the J. Collins Warren Laboratories of the Huntington Memorial Hospital of Harvard University, and now a member of the MGH Board of Honorary Physicians, has received the 1966 Kober Medal of the Association of American Physicians. The presentation of the award was made to Dr. Aub last May 5 in the Ether Dome of MGH by Dr. Paul C. Zamecnik, present director at the Huntington.

Joseph C. Aub, MD

This medal is given annually to some member of the AAP whom the membership desires most to honor for his original contributions to scientific medicine. The award was endowed in 1925 by Dr. George M. Kober, who had migrated from Germany to America in 1867 as an uneducated youth and eventually became professor of hygiene and state medicine at Georgetown University and dean of its medical school.

Dr. Zamecnik's presentation speech, sprinkled with scholarly good humor, gave a veritable life history of Dr. Aub. It will be published in the transactions of the AAP.

Dr. Aub began his MGH career as a medical intern in 1914, following graduation from the Harvard Medical School. After serving with Army Base Hospital 6 (the MGH unit) in France, he was appointed to the Medical Service at MGH and the Department of Medicine at HMS, where he caught the eyes of Walter Cannon and Cecil Drinker. In 1924 Dr. J. Howard Means, Chief of the MGH Medical Services, selected Dr. Aub to be the first clinical investigator to utilize Ward 4, the new metabolic research unit. Concerning this period Dr. Zamecnik stated in his speech: "The age of physiological medicine was just beginning, and in Joseph Aub and his classical studies of calcium and phosphorus metabolism this period of medicine came into full flower."

In 1928 the Harvard Cancer Commission appointed Dr. Aub to succeed Dr. George R. Minot as director of the Huntington Memorial Hospital, then located beside HMS. Dr. Aub also joined the medical service of the Peter Bent Brigham Hospital. Dr. Zamecnik stated:

"Dr. Aub proposed to attack the [cancer] problem in a fundamental way, and to regard cancer as an aberration in growth control. This was a bold course on which to set an entire laboratory effort, since it involved a search for normal control mechanisms as well, and short-range relevancy of such studies to the cancer problem was not immediately apparent. . . . A generation passed before this forward-looking but difficult point of view met general acceptance among the cancer research laboratories of the world."

Just before American involvement in World War II, Dr. Aub and his laboratories migrated to MGH, where he was again appointed to the Medical Services. He was also appointed Professor of Research Medicine by HMS, and later the chairman of the Department of Medicine.

After his statutory retirement in 1956, Dr. Aub was given laboratory space in the Warren Building and he began a fresh study of the surface of the tumor cell. Dr. Zamecnik said that his investigations "now point a finger at chemical reactions at the cell surface which may help to explain the little understood phenomenon of loss of contact inhibition which has lately come to be regarded as one of the hallmarks of malignancy."

Dr. Aub's inquiring mind once led him into the newly opening field of radiobiology. In 1936 he and Dr. Robley Evans of MIT engaged in an investigation of radium excretion which Dr. Zamecnik described as having "lighted the first therapeutic candle for the atomic era."

Dr. Aub has participated in numerous medical missions of national and international scope, and has served as an officer in several scholarly societies. His membership in the National Academy of Sciences is distinctive, for not many physicians are admitted to that learned body.

The AAP made a good choice.

The Countway Library of Medicine is currently exhibiting 24 early American medical imprints ranging from 1702 to 1820. The exhibit was prepared by Mrs. Robert C. Cantu, HMS reference librarian, whose husband is an MGH neurosurgical resident. It includes the only surviving copy of the second printing of Thacher's *Brief Rule* (Boston, 1702), a copy of the first issue of the first American medical journal, *The Medical Repository* (1797), and a copy of the first official American pharmacopeia (Boston, 1820).

In the photograph below, Dr. Stanley P. Bohrer, formerly of MGH, plays the West African board game of ayo with two friends in Ibadan, Nigeria, where he served 16 months as visiting lecturer in radiology at the Ibadan University College Hospital. He wears a jacket made from locally dyed adere cloth. A pair of Ibeji dolls and two calabash rhythm instruments stand on a camel blanket draped over a bookcase. An account of Dr. Bohrer's experiences in Nigeria appeared in the Aug. 15, 1966 issue of The Journal of the American Medical Association.

A Letter from Da Nang

The following was excerpted from a handwritten letter sent by Dr. Gerald S. Moss to Dr. Charles E. Huggins last spring from Vietnam, where Dr. Moss conducted a successful field trial of the Huggins Cytoglomerator. An article on this apparatus for storing frozen blood appeared in the November 1964 issue of The NEWS of MGH. *Dr. Huggins is a member of the MGH Surgical Service and Assistant Director of the Blood Bank and Transfusion Service.*

As I sit here in the Mobile Frozen Blood Bank at the Station Hospital, Da Nang, South Vietnam, my mind wanders back over my year away from home. In 1963 I had accepted a staff position on the surgical service of NIH, to begin when my MGH residency was over in 1965. However, Vietnam changed all that, and the U. S. Navy decided to send me there as a surgeon. I was also to look after the Frozen Blood Feasibility Study, which was soon to commence in Da Nang.

In July 1965 I reported to the Naval Hospital in Chelsea, Mass. and spent ten days reviewing the frozen blood picture. I learned that frozen red cells had been studied minutely both at Chelsea and at MGH. These cells could be stored for long periods of time, and in addition represented universal donor cells. Their desirability in a combat military hospital seemed clear-cut, but on-the-spot observations would have to be made. The Navy had adopted the method for the addition and removal of the glycerol from the red cells as developed by Dr. Huggins at MGH.

After a training period at Camp Pendleton, California, I left for Pearl Harbor. After a pleasant interlude there, a Boeing 707 jet carried me to Saigon. It was about 8 a.m. as we flew over the delta area at the southern tip of the country. The landscape was flat and emerald green. It was divided into small rice paddy fields, separated by raised earthen walkways. Everything appeared quiet and peaceful, but I noticed that the pilot maintained a high altitude until the last possible moment and then practically dove into the airport. I must admit a certain amount of nervousness as I disembarked from the plane, but to my delight there was not a single VC sniper waiting to to shoot at me.

The next three months were spent at the navy hospital in Saigon waiting for the Da Nang hospital to be completed. The doctors, nurses, and corpsmen there were all first-rate people, but regarded me suspiciously as "the frozen blood man." The fact that I was also a surgeon left everyone a little confused. I was both startled and elated to find out that I wasn't going to live in a tent. Instead, all the medical officers were quartered in air-conditioned apartments, which had two bedrooms, kitchen and living room. I had as a roommate a psychiatrist named Dick Gettman, who turned out to have trained in Boston.

We had a delightful Chinese maid named Loi, who weighed 80 pounds and did the marketing, cooking, cleaning and laundering. Her husband was in the army, and she was the sole source of income for her parents, her husband's parents, and her three children. On Friday nights she prepared authentic Chinese feasts for us, which were eaten with chopsticks and were a culinary delight.

In December I flew up north to Da Nang to set up the frozen blood program. The station hospital was being built on the sandy beach beside the South China Sea. It encompassed about 40 acres and would eventually consist of a number of air-conditioned Quonset huts. Two vans from California had been converted into a blood processing unit and a laboratory unit.

Working with me were Ensign Jim Bates, Chief Irving, and two corpsmen, Roger Larouche and Ken Fowler. The first thing we did was to surround the vans with what appeared to be about 100,000 sand bags — perhaps just a little less. Our defense perimeter consisted of a thin barbed wire fence and six bunkers. The entire complement of the hospital at that time consisted of 4 officers and 36 corpsmen. We were surrounded on three sides by military camps, but on the fourth side was a small valley with a hostile VC village.

The first night I remember being a little apprehensive as the sun settled. As soon as it became dark, illumination flares were fired in the air by American Marines positioned in our vicinity. About midnight I was lying in bed with my boots on, weapon at my side, when suddenly a great deal of small arms fire could be heard at close range. A siren went off in the distance, which signified an attack was imminent. We leaped out of bed and ran to the command post bunker. It was raining. After about two hours of waiting and waiting, the all clear sounded and we collapsed into our beds. The siren rarely went off after that first night.

The hospital opened on January 10, and Commander Brodine from Chelsea had already joined us to set up the frozen blood program. Soon we had the opportunity to use the frozen cells. A Marine had received 18 units of standard blood, while an attempt was made to repair a severed femoral artery. Postoperatively he was still in shock and required more blood. However, all of our remaining blood was incompatible, and so we thawed a unit of frozen cells. The cross-match was compatible, and we gave him 19 units of frozen cells. I have no doubt that the frozen blood saved his life.

U. S. NAVY
MOBILE FROZEN BLOOD BANK
TRAILER

Gerald S. Moss, MD

Since then, the frozen cells have been used many times. I believe that we proved that blood cells can be successfully transported from the USA to a far distant point, that the Huggins cytoglomerator worked satisfactorily under field conditions, and that the frozen cells are effective in treating hemorrhagic shock.

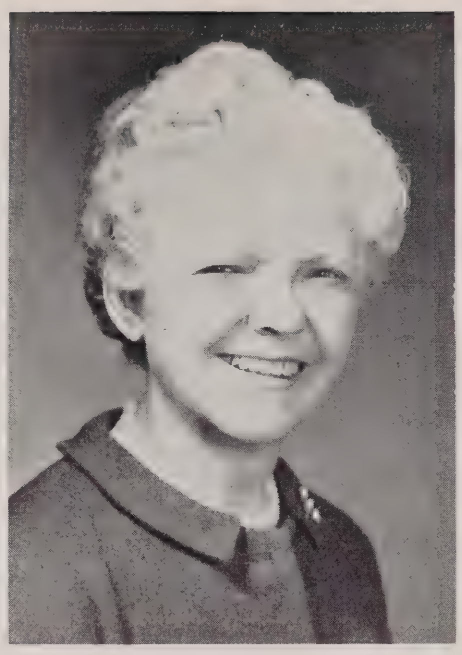
Now as the year draws to a close, I am pleased with what I have done and humbled by what I saw. The pressures, decisions, and experiences while working with the frozen blood have been stimulating and worthwhile.

Dr. Moss is now working for one year at the Naval Medical Research Institute, NIH. He was replaced at Da Nang by Dr. Frederick A. Ackroyd, who finished his MGH surgical residency in 1963.

Dr. Dwight L. Siscoe, an Honorary Physician of MGH, died last August 15 at the age of 77. He graduated from HMS in 1919, interned at MGH, and then took another doctorate at the Harvard School of Public Health. After 1924 he concentrated on the treatment of diabetes at MGH and the Joslin Clinic of the Deaconess Hospital. He was a Fellow of the American College of Physicians.

Dr. Jerome Gross, biologist at MGH and HMS, and **Dr. Alexander Leaf,** Chief of the Medical Services, MGH, and Jackson Professor of Clinical Medicine, HMS, have been elected to membership in the American Academy of Arts and Sciences.

Edna S. Lepper, RN



Ruth Sleeper, RN

Natalie Petzold, RN

Nursing Leadership Changes Hands

A brilliant chapter in the history of MGH nursing closed last September 9 with the retirement of Miss Ruth Sleeper from the directorships of the Nursing Service and the School of Nursing, both of which she had assumed twenty years ago. A new chapter began on the same date with the appointments of Miss Edna S. Lepper as Director of the Nursing Service and Miss Natalie Petzold as Director of the School of Nursing.

A well attended reception in honor of Miss Sleeper was held on August 31 in the Walcott House. A citation was presented to her by Dr. Ellsworth T. Neumann, Administrator:

"To you, Miss Ruth Sleeper, I have the privilege of presenting this citation from the Hospital on behalf of the Trustees and the Administration. During your 33 years of close association with the Nursing Department, and its Director since 1946, you have devoted your professional ability and many talents to the development of the School of Nursing to its present high standards; and in partnership with Miss Lepper, you have brought the Nursing Service to its highest peak of strength and capacity in its long history. Your understanding leadership in nursing and nursing education has been international in scope, and has brought many richly deserved honors to you and added prestige to the MGH. Steadfast to your high ideals, you have combined grace and charm with a firmness of purpose that have won for you our deep respect, sincere admiration, and abiding affection."

Miss Sleeper graduated with the MGH Class of 1922, and earned the B.S. and M.S. degrees at Teachers College, Columbia University. She returned to MGH in 1933 to become Assistant Superintendent of Nurses and Assistant Principal of the School, when Miss Sally Johnson was in charge. Thus she was well prepared to succeed Miss Johnson upon the latter's retirement in 1946. Miss Sleeper was the first nurse to be appointed to the General Executive Committee.

Miss Sleeper has received these honorary degrees: L.H.D., Boston University (1953); D.Sc., Hood College (1954); D.Sc., Wheaton College (1960); and D.Sc., Albany Medical College (1964). In 1959 she received the Florence Nightingale Award, which is given annually in an international competition to a nurse "of superior dedication."

Miss Lepper, likewise an MGH alumna (1926) and a graduate of Teachers College, Columbia University (1938), became Associate Director of the MGH Nursing Service at about the same time Miss Sleeper became Director. Miss Lepper is presently Assistant Professor of Clinical Nursing at Boston University and a member of the Board of Governors of the Human Relations Center in the same institution. She is active on several committees of the Greater Boston Hospital Council and president of District no. 5, Massachusetts Nurses Association. She has succeeded Miss Sleeper on the MGH General Executive Committee. In these days of nurse shortages and increasing nursing workload, it is indeed fortunate that Miss Lepper is available to apply her vast experience to such problems at MGH.

Miss Petzold is the first Director of the Nursing School not to head the Nursing Service, a fact which points out the growing complexity of nursing education. She graduated in 1948 from Simmons College with the B.S. degree and a diploma from its school of nursing. She received the M.S. degree in 1960 from Boston University. She has been teaching at MGH since 1948, and in 1961 became Assistant Director of the School.

Dr. John Knowles, General Director, has stated: "Hospital diploma schools are being closed while new ones are being developed under the aegis of universities and colleges. At the moment, however, three quarters of the nurses in this country are supplied by the hospital-based schools. The MGH is dedicated to the improvement and strengthening of its School of Nursing, and the future will see our efforts concentrated in this direction. Miss Petzold is dedicated to these values and will be responsible for shaping the future of the MGH School of Nursing. New avenues and patterns of nursing education will be explored, and many resources existing in the Hospital and in the community will be drawn upon."

Dr. Knowles's remarks are reinforced by the following statement from the current catalog of the MGH School of Nursing: "The field of nursing is still fluid; new trends are constantly presenting new demands and new challenges."

Coordinated Program Of Nursing School Closed Reluctantly

The retirement of Miss Sleeper coincides with the closing of a highly regarded educational program that began when she first assumed the directorship of the School of Nursing, twenty years ago. Known as the Coordinated Program, it was conceived somewhat earlier by Miss Sally Johnson when Miss Sleeper was her assistant. Both had recognized clearly the need to raise nursing education from the vocational to the professional level, a need arising from the increasing application of medical science to clinical practice.

The Coordinated Program was essentially a two-year postbaccalaureate program in professional nursing made available first to students enrolled in Radcliffe College, and later to qualified graduates of other liberal arts colleges who would otherwise not be attracted to the three-year plan offered by nursing schools conducted by hospitals. The reason for closing the Coordinated Program is explained thus by its chairman, Miss Sylvia Perkins, RN:

"Efforts to raise the standards of education and practice in nursing have lagged behind those of related groups. Educational institutions which offer programs in nursing beyond the baccalaureate level use the standards accepted by their college or university for all departments. Accreditation by the professionally accepted organization is only one evidence of a school's educational standards. However, it is used widely as one criterion for evaluating the credentials of an applicant who wishes to undertake advanced study.

"Unfortunately, the Coordinated Program has not been able to qualify for accreditation. The National League for Nursing requires that the responsibility for a college program in nursing must be assumed completely by a college or university. Radcliffe College was not in a position to take such responsibility. Education for professional nursing has not yet been established with the academic base of a degree in liberal arts, and so the strength of the basic education of the students in the Coordinated Program carries less than full weight at present.

"Another effort made to raise standards is to establish grades of employment with appropriate salary levels. Public health nursing agencies recognize the graduate of an accredited baccalaureate program in nursing as the one best prepared for the practice of public health nursing.

"Some of the graduates of the Coordinated Program were accepted by some universities for advanced study when the results of placement examinations and the curriculum of the Program were reviewed. Some public health agenices employed them as fully prepared public health nurses. Nonetheless, it was seen that it was unfair to the graduates of the Coordinated Program to prepare them at a superior educational level and yet for the Program to be unable to meet all of the criteria for accreditation. Reluctantly, it was decided to terminate the Coordinated Program — at least in its existing form and for the present."

THE ABOVE PHOTOGRAPH shows Miss Ruth Sleeper, Director Emerita of the School of Nursing and the Nursing Service, presenting diplomas to five members of the last graduating class of the Coordinated Program in a ceremony held on September 2, 1966, in the Walcott House.

LEFT TO RIGHT: Miss Sleeper; Elizabeth Gramlich, B.A., Mt. Holyoke, 1964; Anne Morgan, B.A., Wellesley, 1963; Margaret Earle, B.A., Radcliffe, 1964; Anne Keith, B.A., Radcliffe, 1964; Katherine Murray, B.A., Wellesley, 1964; Henrietta Golec, Senior Clinical Instructor; and Sylvia Perkins, Chairman of the Program.

The MGH School of Medical Illustration graduated **Tehrie Holden,** M.F.A. (Fordham), and **Kathryn Reinhardt,** A.B. (Univ. of Kansas) last June 17. Miss Holden is now working with Mildred Codding, surgical artist at the P. B. Brigham Hospital; and Miss Reinhardt is working with William Osburn, medical art director at the W. B. Saunders Company, medical publisher of Philadelphia.

Mr. John J. Fields, who has contributed numerous excellent photographs to *The NEWS of MGH,* is no longer with us. He had been working under **Dr. Stanley Bullivant** in the Electron Microscopy Laboratory, but now they are both members of the department of microbiology at the University of Auckland, New Zealand. However, Mr. Field's photographs will appear in future issues.

The Editorial Board of *The NEWS of MGH* extends thanks to all subscribers who mailed in invoice forms with enclosed checks for $3 subscriptions and contributions, some of the latter amounting to as much as $25 or $30. Checks are still coming in at this late date, and so a summary report is postponed until the next issue of *The NEWS.*

MGH Medical Photography Unit

From left: Drs. Russell, Knowles, Glaser and Ebert

Another Volume of Lowell Lectures Is Released by Harvard

The MGH Lowell Lectures of 1965 were presented again in the form of a book released to the reading public on October 10, 1966 by the Harvard University Press. The title of the book is *The Teaching Hospital: Evolution and Contemporary Issues.*

The four lecturers in this series were: Dr. Robert J. Glaser, President of the Affiliated Hospitals Center, Inc., and Professor of Social Medicine, HMS; Dr. Paul S. Russell, Chief of the Surgical Services, MGH, and Homans Professor of Surgery, HMS; Dr. Robert H. Ebert, Chief of the Medical Services, MGH, and Jackson Professor of Clinical Medicine, HMS; and Dr. John H. Knowles, General Director and Physician, MGH, and Lecturer on Medicine, HMS.

(Dr. Glaser subsequently left Boston to become Vice President for Medical Affairs and Dean of the School of Medicine at Stanford University; and Dr. Ebert, on July 1, 1965, became Dean of the Faculty of Medicine at the Harvard Medical School.)

The reason for selecting the teaching hospital as the subject of the 1965 Lowell Lectures is summed up in the introduction to the book by its editor, Dr. Knowles:

"The hospital as health center now provides one of the best social and technical instruments available to the profession and to the community for the solution of the medical care problems of somatic, psychic, and social dis-ease, as well as the companion problems of rising costs and expectations. Unfortunately, the doctor still views the hospital as *his* host, and the public views it through the glasses of misinformation (or lack of information), fear, and financial hardship.

"The hospital provides the platform where the profession meets the public. The 'public' includes patients, expanding state and federal medical care plans (Hill-Burton; Medicare; Heart Disease, Cancer and Stroke Law), Blue Cross and commercial insurance companies, organized consumer unions, organized medicine in the form of state and national medical societies (the American Medical Association, American College of Radiology), political representatives, and so on. The hospital finds itself occupying the central position amidst these forces, some fighting for short-term selfish interest, but all looking with rising hopes and expectations to the institution. Better understanding of the hospital, its historical evolution, its present problems, and its obligatory role as a social instrument is necessary if the medical profession and the local community wish to keep the use of this instrument in their own hands. Change in all these forces which influence and shape the medical world demands that the medical curriculum change and that the profession change with it."

We look forward to still another volume — the 1966 Lowell Lectures.

Infirmary . . .

Continued from Page 1

relations, Dr. John Knowles has stated:

"We are all aware of the unique qualities of the two institutions and the crucial importance of maintaining the clear identity of each. Both can continue to enjoy a healthy and necessary degree of autonomy within the framework described above — crucial to the individuals involved and to their best efforts. Where appropriate, joint action can only serve to improve and enhance the excellence of our common concerns — the care of the sick and injured, the teaching of students, and the researching of the cause and effect of disease."

Treadwell Library

The Ida and George Eliot Prize Essay Award is a mark of distinction in the medical library field. The 1966 winner was a brochure entitled *Medical Library Careers* and produced last year by the Medical Library Association's Subcommittee on Recruitment, of which Miss Genevieve Cole, Treadwell Librarian, was chairman. She received the Eliot Award on behalf of her committee at the 65th annual meeting of the Medical Library Association, held in Boston last June.

This brochure was judged to have done most to promote the profession of medical librarianship. It portrays the medical librarian as a specialist utilizing modern techniques of bibliographic processing and retrieval to bridge the gap between the physician and the up-to-date scientific information he needs.

The Medical Library Association (MLA) was founded in 1898 with 65 charter members, and now numbers more than 2,000 members, including about 150 in other countries. Its original purposes were to foster the growth of medical libraries and to maintain a duplicates exchange program. Miss Grace W. Myers, the first full-time MGH librarian (appointed in 1897), wrote an article on the Treadwell Library which was published in the March 1899 issue of *Medical Libraries,* the first organ of the MLA.

The functions of the MLA have since been extended to the setting of medical library standards and the professional certification of medical librarians. Its headquarters is in Chicago. Miss Cole currently holds the office of MLA Secretary.

The MLA took an active role in securing passage of the Medical Library Assistance Act (PL 89-291), which was signed by President Johnson on October 22, 1965.

The NEWS of MGH

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MGH Cyclotron Will Accelerate Investigation by Pulmonary Unit

The installation of a medical cyclotron in the Pulmonary Function Laboratory of the Department of Medicine will mark a new phase in radioisotope research at the MGH. However, the history of the development of radioisotope applications and the medical use of cyclotrons are closely linked with MGH history.

The invention of the cyclotron by Professor Ernest O. Lawrence of the University of California was perhaps the leading single contribution to the field of nuclear accelerators. Together with M. Stanley Livingston, then a graduate student, he built and successfully operated a prototype cyclotron in 1930. A larger machine was immediately built, utilizing a magnet with a pole diameter of 11 inches, and protons of 1.22 million electron volts were obtained in 1931 from this machine.

In common with many other important inventions, the principle of the cyclotron seems so straightforward that it is surprising it was not previously considered. The fact that charged particles travel in circular orbits after entering a magnetic field had been known for sometime. It was also known that the time required for a particle to complete one orbit is independent of its energy and depends only on the ratio of charge to mass of the particle and on the magnetic field. It was also well known that a particle traveling through an appropriate voltage difference acquires energy in so doing. It remained for Lawrence to combine these well proven principles in such a way that particles could be continuously accelerated to very high energies in a machine of practical dimension.

The beam orbits within the cyclotron are inside two boxes shaped somewhat like the two halves of a pillbox that has been sliced through the center. The two boxes are appropriately called dees, and the voltage on these two dees can be varied by means of an external oscillator. Charged particles are injected into the center of the two dees and are accelerated by the electrical potential as they pass from one dee to the other. The particles then travel along a circular orbit until they again traverse the gap between the two dees. The frequency of the oscillator is such that the voltage across the gap separating the two dees is reversed and the particles are again accelerated.

This process repeats as the particles spiral outward, acquiring a certain amount of energy each time they traverse the gap. Therefore the maximum energy obtainable for a given particle is dictated by the size of the magnetic field or, roughly, the diameter of the magnet pole faces, and cyclotrons are often designated by this diameter. For example, the first full-scale cyclotron of Lawrence and Livingston was an 11 inch cyclotron.

In order to extract particles from the cyclotron, some mechanism must remove them from the final orbit. This is usually done by means of deflector plates. As the particles reach maximum radius, they enter a fine septum between two deflector plates and their path is sufficiently altered so that they emerge from the magnetic field. The accelerated particles can then be used to produce isotopes or neutrons or for direct irradiation.

After the successful demonstration of the cyclotron at Berkeley, a number of machines were built in the United States, including Harvard and MIT. The MIT machine, still in operation, is of considerable interest to us because of its close association with MGH projects. It was built under the supervision of Prof. Livingston, who came to MIT after obtaining his degree at Berkeley. He has been associated with a number of accelerator projects at MIT and is currently director of the Cambridge Electron Accelerator, jointly operated by Harvard and MIT. Prof. Livingston also provided valuable advice in the selection of the MGH cyclotron.

MGH Med. Photography Unit

This P&H tower crane began work on the construction of the Surgical and Special Services Building last November. It weighs 110 tons, and can lift a load weighing up to 7 tons. With the boom fully extended, its height is 265 feet.

It is interesting that the MIT cyclotron was supported by the John and Mary Markle Foundation, which is medically oriented, and medical applications for this machine were contemplated from the earliest planning.

Continued on Page 4

Larry Cook, Med. Photography Unit

Dr. John H. Knowles, General Director, wields the bricklayer's trowel at the cornerstone ceremony for the Surgical and Special Services Building. Looking on with jovial approval are Joseph W. Degen, Assistant Director (far left), and John E. Lawrence, Chairman of the Board.

Another Cornerstone Is Laid

Phillips Ketchum, Honorary President

The NEWS of MGH

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The cornerstone of the 13-story Surgical and Special Services Building at the MGH was laid with appropriate ceremony on the morning of January 13, 1967. The foundation had already been completed, and the steel frame on that date extended up through the 6th floor level. This will be the largest and costliest hospital building erected to date in New England. It was designed by the architectural firm of Rogers, Butler and Burgun.

Thirteen operating rooms will be completed in 1968, and 8 more will be added later. These 21 rooms will all be on the 3d floor level, contiguous with the 12 operating rooms in the White Memorial Building. Thus MGH will have an integrated surgical operating suite of 33 rooms. The old operating rooms in the Baker Memorial and the Phillips House will be closed.

Although the upper 9 floors of the main wing (extending north from the White Building) will not be completed at this time, erecting the shell and installing the elevator system to full height now will result in a subsequent saving of about $500,000. The entire east wing (extending along Blossom Street) will be completed to provide space for many urgently needed research facilities.

The cost of this first phase of construction will approximate $21.5 million. More than $13.5 million has been raised to date, including $2.6 million from the U. S. Public Health Service. The Board of Trustees aims to raise the balance by the end of 1968.

John E. Lawrence, Chairman

Subscriber Contributions

The Editorial Board of *The NEWS of MGH* reports that during 1966 a total of $3,026 was received from 708 subscribers, of which sum about $900 consisted of contributions beyond the $3 subscription rate. Five contributions ranged between $20 and $30 each, and ten between $10 and $20 each. Thirty-three contributions were for $7 each. Most of the remaining contributions were for $5 each — all beyond the regular fee.

Once again the Board extends sincere thanks to the subscribers for their generous support, and to those members of the Staff who have contributed articles and photographs for publication in *The NEWS*.

Hartford Grant for Aldosterone Study

A 3-year study of the metabolism of aldosterone is being supported at MGH by a $267,552 grant from the John A. Hartford Foundation of New York. This is an offshoot of a previous 3-year investigation of mechanisms of fluid and electrolyte transport supported by a $254,000 grant from the same foundation.

This program is directed by Dr. Alexander Leaf, Chief of Medical Services, MGH, and James Jackson Professor of Clinical Medicine, HMS, with the close collaboration of Geoffrey W. G. Sharp, Ph.D., Research Fellow in Medicine, MGH, and Associate in Pharmacology, HMS.

Aldosterone is a potent adrenocortical hormone with an important but inadequately understood role in the regulation of electrolyte metabolism. About 3 million Americans have hypertensive disease because of hypersecretion of aldosterone. Others with Addison's disease lack this hormone.

Dr. Pittman Honored

Smith College has granted an honorary degree of Doctor of Science to one of its alumnae, Dr. Helen S. Pittman of MGH. The citation reads:

"Your career triumphantly demonstrates the precise conjunction of heart and head which make up the great physician. Smith College can pride itself on giving breadth to your general understanding of humanity, while Johns Hopkins gave depth to your professional competence to handle humanity's ills. But throughout almost forty years of service it has been your own sturdy heart, level head, and frank tongue that have spelled courage to your patients, and your shrewd judgment that has been a source of inspiration to your physicians at Harvard Medical School and Massachusetts General Hospital. Smith College is grateful for your work as Counselor and friend to its Health Services and delighted that an alumna has so fully vindicated Sophia Smith's hopes for her College."

Dr. Pittman was Chief of the MGH Pulmonary Clinic from 1942, when she succeeded Dr. Donald S. King, to 1959, when she in turn was succeeded by Dr. John H. Knowles. Her 17-year term saw the advent of the antibiotics, which enabled pulmonary medicine to progress from the previously heavy reliance on surgical support to the present emphasis on medical control through the evergrowing knowledge of pulmonary physiology.

Dr. Pittman is now a member of the MGH Board of Consultation.

MGH Tops List

A panel of ten experts selected by *Ladies' Home Journal* have submitted answers to the following questions: "If you or your family required major hospital services — diagnosis or treatment — which 25 hospitals in the United States would you select as representative of the best? Which hospitals would you put in the top ten?"

The tally of the panel's votes showed MGH placing first on the list of best American hospitals. In general, the panelists picked large teaching hospitals; and of the 7,123 general hospitals in the country, only 175 received votes. The names of the panelists, together with some of their comments, were reported by Roul Tunley in the February issue of *Ladies' Home Journal.*

David Weisberger, DMD, MD
(1903 — 1966)

Dr. David Weisberger, Chief of the MGH Dental Service and Professor of Dental Medicine in the Harvard School of Dental Medicine, died last November 8 at the age of 63 after a brief illness.

Dr. Weisberger came into notice early in his career at Harvard when he discovered the relation between rampant tooth decay and reduced salivary gland secretion in animals. Later he elucidated the role of altered glycogen metabolism in leukoplakia and found a correlation between liver cirrhosis and oral cancer. More recently, he had been investigating the antigenic process in the rejection of tooth transplants.

At MGH his first concern was to develop the Dental Clinic into a full service. In 1948, shortly after becoming Chief, he wrote: "In a small service such as we have, a limited point of view becomes a threat in the training of house officers. We hope to correct this by utilizing for house service some of our well-trained visiting staff whose activities for some time have been limited to the Clinic, only." (*The NEWS of MGH,* Aug. 1948)

Two years later he reported that "the clinic is organized with a large visiting staff skilled in caring for the surgical conditions arising in the ambulant patient. . . . When one evaluates the care received by the patient, together with the training made available to the interns, it would appear that the development of this service is justified." (*The NEWS of MGH,* Oct. 1950)

In 1952 he was able to state that most of the laboratory studies underway at the Harvard School of Dental Medicine were based on observations made at the MGH.

Dr. Weisberger was a Diplomate of the American Board of Oral Medicine and a Fellow of the American Academy of Dental Sciences. In 1957 he was awarded an honorary degree by the American Academy of Dental Medicine.

Dr. Walter Guralnick is now acting Chief of the MGH Dental Service.

Service League

The annual luncheon of the Service League is being held on March 2 at the Charterhouse on the Charles River, opposite the MGH. The principal speaker is Dr. Kenneth Bird, his subject being the facility of which he is director — the MGH Medical Station at the Logan International Airport.

The Reception Center on Moseley I reports that during the past year 100 more tickets to concerts, etc. were distributed to MGH staff members from overseas than during the previous year. These tickets are generously donated by holders who find that for one reason or another they cannot use them.

Cyclotron . . .

Continued from Page 1

In more than 30 years of operation the MIT cyclotron, under the direction of Prof. Robley Evans, has proved its worth many times over, both in the physical sciences and in medicine and biology.

In the fall of 1936. Dr. Karl Compton, then president of MIT, addressed a Harvard Medical School colloquium on the subject, "What Physics Can Do for Biology and Medicine." During the talk he mentioned the possibility of producing radioisotopes from stable chemical substances. This created a good deal of excitement among those present, and after the discussion Dr. Compton was asked by Dr. J. Howard Means, then head of the Thyroid Clinic and Chief of the Medical Services at MGH, whether it was possible to produce a radioactive form of iodine. Dr. Compton replied that he would attempt to find the answer, and very soon communicated to Dr. Means that Fermi in Italy had produced a form of radioactive iodine. This discussion led to a cooperative study on the subject by MGH and MIT, culminating in a long and profitable series of studies with radioactive iodine in the Thyroid Clinic.

In 1941 a patient with hyperthyroidism was treated with radioactive iodine by Drs. Hertz and Roberts at the MGH. This may have been the first therapeutic application of an artificially produced radioisotope, although similar studies were beginning at Berkeley under the direction of Drs. Hamilton and John Lawrence, the brother of the inventor of the cyclotron. Between 1941 and 1943, 29 patients were treated with radioactive iodine at MGH by Hertz and Roberts, and in 1946 Drs. Chapman and Evans concluded that radioactive iodine is effective in the treatment of hyperthyroidism. Since that time, of course, the use of iodine 131 has become so widespread that hundreds of medical centers now administer diagnostic and therapeutic doses of this isotope.

It is interesting to note that the advent of nuclear reactors after the second World War provided a simpler and easier method of producing radioiodine, and from that time virtually all iodine 131 has been produced in reactors. This has been a common fate of many cyclotron-produced isotopes. For many reasons, including government support and ease of operation, the reactor has proved to be a more convenient source of many isotopes than the cyclotron. However, the fact remains that nearly half of the isotopes with usable half-lives and radiations can be made only in a cyclotron. Consequently, after a long period of relative inactivity, interest is shifting back to the cyclotron.

The possibility of direct use of radiation from a cyclotron was also considered at a very early date. Dr. Robert Stone at Berkeley considered the application of fast neutrons in therapy. The cyclotron was — and still is — a copious source of fast neutrons. It also has the advantage, in comparison with a reactor, of producing fast neutrons relatively free from gamma ray contamination. For various reasons, however, the studies carried on by Dr. Stone on fast neutron therapy were unsuccessful. Perhaps the most important factor was lack of adequate instrumentation for the precise measurement of radiation dose in the irradiated patients. In any case, the results of Stone have discouraged investigators from using fast neutrons. However, interest in the application of fast neutrons in radiation therapy has recently been revived at several centers, and this may be one area which will be explored with the MGH cyclotron.

The history of cyclotrons and the succeeding generations of synchrotrons, synchrocyclotrons, bevatrons, etc., has been one of a spiraling rise in size, energy, and cost. Although the basic interest in these high energy machines is not biological, many of them have found biological application. This is particularly true of the 184-inch cyclotron at Berkeley, which has been used for direct proton beam irradiation of patients, utilizing protons of sufficient energy to penetrate large distances in tissue. The possibility of using mesons for radiation therapy has also been explored. Similarly, the large cyclotron at Harvard and the cyclotron at Oslo, Norway, have been used for proton beam irradiation.

The work at Harvard carried on by Drs. Kjellberg and Sweet of the MGH Neurosurgical Service has had as its principal aim the use of a proton beam to destroy small regions in the brain. This technique has been used in the treatment of Parkinson's disease and for various forms of pain relief, as well as to destroy the pituitary gland without surgical intervention.

From a medical point of view, one of the most interesting cyclotrons is the 45-inch cyclotron installed by the Medical Research Council at Hammersmith Hospital in London, specifically for medical use. Although this cyclotron has had a variety of medical applications, perhaps the principal development at Hammersmith has been the use of the three short-lived isotopes, oxygen 15, nitrogen 13, and carbon 11. These have half-lives of from 2 to 20 minutes, and each decays with the emission of a positron. The annihilation of the positron gives rise to high energy photons which can be detected externally. These isotopes have proved to be of great value in the study of pulmonary physiology; and in particular, oxygen 15 — in the form of CO_2 or CO or O_2 — has found wide use. Dr. John West of Hammersmith Hospital has been one of the leaders in exploiting the possibilities of oxygen 15, although Dr. Ter-Pogossian of Washington University had employed these isotopes some years earlier.

The use of such short-lived isotopes requires a completely new technology. Most isotopes are produced in a reactor or cyclotron, processed in a rather conventional radiochemical laboratory, and stored until desired in an experiment. Short-lived radioisotopes such as oxygen 15 must be produced immediately before use, and the processing must be carried out on a time scale commensurate with the half-life of the isotope. Obviously the physiological phenomena must occur on a similar time scale. Many processes in pulmonary physiology, such as oxygen absorption from the lungs and the determination of perfusion and ventilation of the lungs, satisfy this criterion. Although these gases have not yet been used in pulmonary studies at MGH, Drs. Kazemi and Streider of the Pulmonary Function Laboratory and Dr. Aronow and others of the MGH Physics Research Laboratory have begun studies with xenon 133 and have worked out many problems of detection and recording which will arise in the use of oxygen 15.

Alternatively, short-lived isotopes may be used to tag blood components in measuring blood flow in organs other than the lungs. For example, brain blood flow can be measured by use of tagged red cells after inhalation of small amounts of carbon monoxide labeled with carbon 11 or oxygen 15. Indeed, blood flow in any portion of the body can be measured by means of similar techniques.

The advantage of short-lived isotopes in all of these applications, other than the fact that there are no long-lived isotopes of nitrogen and oxygen, lies in the very small radiation dose received by the patient during such measurements. Because the half-lives used are comparable to the duration of the phenomena being observed, the radiation dose is usually a very small fraction of that which would be received in using conventional, longer-lived isotopes.

To a certain degree the MGH cyclotron is related more to the original cyclotron of Lawrence than to the mammoth new machines currently being planned and built, such as the proposed 200-bev accelerator. However, the MGH cyclotron has been designed specifically for the tasks it will perform. It has an advantage in being the second built by the Allis-Chalmers Company. The first Allis-Chalmers unit was installed at Washington University in St. Louis and is currently being used for production of oxygen 15 and carbon 11. The

MGH Med. Photography Unit

Site of the future Shriners Burns Institute on Blossom Street, as it looked on October 10. The steel frame is now rising rapidly.

principal aim in the design of the MGH cyclotron is the routine production of the three short-lived isotopes, oxygen 15, nitrogen 13, and carbon 11. This can be accomplished with deuterons of relatively low energy. A second requirement is the capability of producing large numbers of fast neutrons, and these can also be produced with moderately high currents of low-energy deuterons. Finally, it is desired to use this cyclotron in a limited way for activation analysis and for the direct irradiation of biological media. For this purpose provision has been made for the acceleration of helium-3 ions. Based on these requirements, the second Allis-Chalmers machine has been designed as a 33-inch cyclotron which will accelerate 6-mev helium-3 ions. The design emphasizes simplicity and reliability, which hopefully will lead to a machine that can be operated in a routine manner.

Although the MGH cyclotron is considered a small machine, some of its dimensions would appear otherwise. For example, the weight of the steel in the magnet is 25 tons. The magnet will require 40 kilowatts of d.c. power to produce a magnetic field capable of holding the particles within the cyclotron; and overall, the cyclotron and its ancillary equipment will require 150 kilowatts of power. To dissipate the heat generated in the magnet, 60 gallons of cooling water per minute are required.

A great deal of attention has been given to the problem of safe operation of the MGH cyclotron. The design of shielding for the cyclotron room is extremely conservative. The basic shielding consists of 4 feet of concrete above the machine and 3 feet of concrete in the walls as well as the earth fill. The basic consideration is that the dose rate at the outer surface will be within tolerance under the most stringent operating conditions. These conditions would exist when the full deuteron beam current is incident on a beryllium target to produce neutrons. It is very unlikely that levels of radiation even approaching this magnitude would ever actually be produced, at least without supplementary shielding. During normal operation of the cyclotron to produce short-lived isotopes, the radiation level will be relatively low.

Three Victoreen area monitors will continually record radiation levels at various locations in the cyclotron vault, the shielded chemical processing room, and one other area. In addition, an air monitor will sample radioactivity in the air at various locations in the cyclotron laboratory and in the various laboratories where the radioactivity will be used. Facilities have been provided for using the short-lived isotopes in any of the laboratories immediately adjacent to the cyclotron, as well as the new Shriners Burns Institute, should that be desired in the future.

The ancillary equipment is as important as the cyclotron itself for effecting successful use of short-lived isotopes. A gas-handling system has been designed and is in the process of construction. It will automatically process gas in the chemical form desired, and will monitor the gas and send it to the desired location. In addition, a beam transport system is being designed to focus the beam at a remote location for direct irradiation of targets or specimens in the cyclotron room and for the production of neutrons.

The cyclotron is to be located in and be part of the Pulmonary Unit, which includes the pulmonary research conducted with cyclotron-produced isotopes by Drs. Kazemi and Streider. The operation of the cyclotron will be the responsibility of the Physics Research Laboratory. The principal task of the cyclotron staff will be to provide short-lived isotopes for clinical investigators in pulmonary physiology. However, it is hoped that short-lived isotopes will find application in a number of other areas, such as cerebral, renal, and other blood flow studies.

The possibilities of the MGH cyclotron are exciting. The many anticipated applications for short-lived isotopes, coupled with the considerable interest in positron detection and positron scanning at MGH, create an ideal atmosphere for exploiting their potentials. Such being the case, it is hoped that the MGH will again take the lead in exploring a new frontier of medical science.

Gordon Brownell, Ph.D.
Director of the
Physics Research Laboratory
MGH

G. W. Taylor, MD

(1897 — 1966)

Dr. Grantley W. Taylor, a member of the MGH Board of Consultation and formerly Associate Clinical Professor of Surgery at the Harvard Medical School, died last December 26 at the age of 69 while vacationing on St. Vincent's Island in the West Indies.

Dr. Taylor was graduated from Harvard College in 1918 and from HMS in 1922. He was an intern and resident at MGH until 1925, when he was appointed to the Active Staff. It was in 1925 that the MGH Tumor Clinic was established — the first consultative and follow-up cancer clinic in any general hospital — and Dr. Taylor was associated with it throughout his career. He was chairman of the Tumor Clinic Committee from 1946 until his statutory retirement in 1957.

Dr. Taylor and Dr. Ira T. Nathanson published a well known book entitled *Lymph Node Metastases* (Oxford University Press, 1942). In reviewing this work Dr. Ernest M. Daland, then head of the MGH Tumor Clinic, wrote, "The reviewer insists that this is one of the most important cancer books published in a decade."

During World War II, Lt. Col. Taylor was awarded the Bronze Star Medal for meritorious service as Chief of Surgery with the 95th Evacuation Hospital in Italy and France. Earlier he had been Assistant Chief of Staff with the 6th General Hospital.

In 1960 Dr. Taylor received an award from the Massachusetts Division of the American Cancer Society "in recognition of his outstanding contribution to the control of cancer." He was elected to fellowships in the American College of Surgeons and the International Society of Surgery. He was president of the New England Surgical Society, New England Cancer Society, and Boston Surgical Society.

B. F. Herzog

Dr. Austen (left) and Dr. Russell

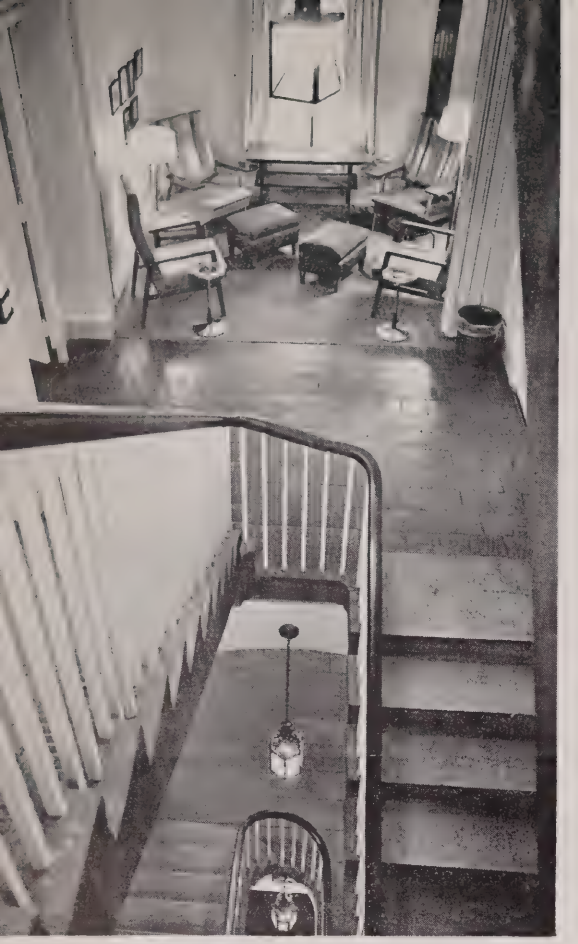
Dr. Austen Promoted

Dr. W. Gerald Austen, Chief of the MGH Surgical Cardiovascular Research Unit since 1963, has been appointed a full professor of surgery at the Harvard Medical School at the age of 36. In the above photograph he is seen with Dr. Paul S. Russell, Homans Professor of Surgery, and Chief of the MGH Surgical Services.

Dr. Austen's development as a cardiac surgeon was accelerated by the engineering knowledge he acquired at MIT, from which he was graduated in 1951. He was graduated from HMS in 1955. While an intern at the MGH, he and Dr. Robert S. Shaw built the first heart-lung machine to be used in this hospital. Dr. Austen also devised a mechanical model of valvular function and worked out a procedure for exposing the obstructed aortic valve during surgery. The first successful application of this procedure was done at the MGH by Dr. J. Gordon Scannell in 1957.

Currently Dr. Austen is conducting a series of investigations on the problem of myocardial revascularization and is also interested in the problem of hypertension in the pulmonary vascular circuit. He is collaborating with the Department of Chemical Engineering at MIT in a study of materials that may be compatible with the human organism.

Dr. Austen received a 5-year Markle Scholarship in 1963. Despite his heavy research and teaching schedule, he finds time to perform a number of open-heart operations each week.



John J. Fields

Staircase in Bulfinch Building

Treadwell Library

The following books, all published in 1966, were written by MGH authors or are otherwise of special interest to MGH readers:

Carl Binger, MD. *Revolutionary Doctor: Benjamin Rush,* 1746-1813. New York; Norton.

Abigail Adams Homans. *Education by Uncles.* Boston; Houghton Mifflin.

David McCord, ed. *Bibliotheca Medica: Physician for Tomorrow.* Dedication of The Countway Library of Medicine. Harvard University Press.

Richard L. Sidman, MD, and Murray Sidman, PhD. *Neuroanatomy.* Boston; Little, Brown.

Edward Weeks. *The Lowells and Their Institute.* Boston; Little Brown.

Claude E. Welch, MD. *Surgery of the Stomach and Duodenum.* 4th ed. Chicago; Year Book Medical Publishers.

A new history of the Harvard Medical School, written by Dr. Sidney Burwell, Dean Emeritus of HMS and an MGH alumnus (1921), will soon be released by the Harvard University Press. This is a work of the greatest magnitude.

MGH Briefs

Dr. Henry R. Viets, MGH Honorary Physician and Curator of the Boston Medical Library, has been elected an honorary member of the William Osler Club of London.

Dr. Robert S. Schwab, Director of the Brain Wave Laboratory, will be given a dinner on March 18 at the Sheraton Boston Hotel by the American Parkinson Disease Association.

Dr. Kurt J. Isselbacher, Chief of the Gastrointestinal Unit, has been elected to the presidency of the American Association for the Study of Liver Diseases (1966-67). In addition, he was recently invited by the American Swiss Foundation for Scientific Exchange to be visiting university professor and to lecture at the five medical schools in Switzerland.

Dr. H. Thomas Ballantine, Jr., Visiting Neurosurgeon, lectured on "Medicine and Chiropractic" in Chicago last October at the Third National Congress on Medical Quackery, which was sponsored by the American Medical Association and the National Health Council.

Dr. Stanley P. Bohrer, a member of the MGH Department of Radiology until last December 31, has rejoined the staff of the University College Hospital in Ibadan, Nigeria, where he had previously served 16 months as visiting lecturer in radiology.

Dr. Michael E. DeBakey, Professor and Chairman of the Department of Surgery at the Baylor University College of Medicine, delivered the Edward P. Richardson Lecture at MGH in the Bigelow Amphitheater last January 17, his subject being "Clinical Patterns of Cerebrovascular Insufficiency and Their Surgical Implications."

Mrs. Edith Tagrin, Director of the Medical Art Unit, received an Outstanding Service Award at the annual meeting of the Association of Medical Illustrators, which was held last October in Atlanta.

The new corridor connecting the Baker, the White, and the SSS Building on the ground floor level, has been opened to traffic — much to our relief.

The McLean Newsletter has made its initial appearance in a new format. This attractive paper is edited and produced at the McLean Hospital by the Public Relations Office, of which Mrs. Barbara R. Hopkins is the director.

Sixth General Hospital

A reunion of all officers of the Sixth General Hospital, the MGH unit in World War II, will be held at the White Cliffs Motel in Plymouth, Mass. on the weekend of May 6 and 7 in celebration of the 25th anniversary of its activation in 1942.

Mrs. John B. McKittrick is the general chairman for the reunion, and is being assisted by a cadre consisting of Drs. Daniel Holland, Alfred Kranes and Howard Ulfelder.

Five hundred new Wedgwood Queensware service plates, designed originally for the 150th anniversary of MGH, are again available at $4.25 each through the General Store and Gift Shop conducted by the Ladies Visiting Committee. The design of this 10½ inch plate shows a view of the original Bulfinch Building and wharf, enclosed within a clover border—all in MGH blue.

A Letter from Conakry

Monsier Scannell, Très cher Docteur:

J'ai le plus grand plaisir de vous écrire cette lettre pour vous renouveler mon indéfectible attachment à vous même personnelement, ainsi que tous ceux à vos côtés ont contribué aux succès de mon opération. . . . Oui vous m'avez fait réagir dans une vie nouvelle, un monde non veau; vous m'avez donnée en somme un avantage radieux. Grâce à vous et à votre ami et frère Docteur Hiebert j'étais devenu en Amerique un africain au milieu des siens. L'Amerique était devenue pour moi l'Afrique ma mère patrie . . . L'amour tendre à mon égard se manifestait dans toute les occasions, je ne pourrais jamais oublier l'Hôpital Massachusetts Général, le 7 floor, ses douces et souriantes infirmières qui aiment leurs patients, leurs malades, leurs hôtes. Je vous prie de dire à tour vos amis et collégues que leurs passions de l'âme à marquer grandement ma vie. Mon salut des meilleurs à tous ces Docteurs MacNamara, Cooper et Scannell et tant d'autres que je ne puis citer. . . .

Très sincèrement votre ami de tous les temps.

Traoré Kabiné

Dr. J. Gordon Scannell says that the writer of the above letter is a young schoolteacher in the Republic of Guinea who was seen in cardiac clinic by Dr. Clement Hiebert during the latter's tour of duty aboard the S.S. Hope. *Mr. Kabiné was subsequently admitted to MGH for replacement of the aortic valve, and now is back home and teaching in Conakry.*

The Coordinated Program in Retrospect

A very interesting 20-year experiment in nursing education terminated at the MGH in September 1966. Fifty young women, graduates of Radcliffe, Wellesley, Mount Holyoke and other eastern liberal-arts colleges, had completed what was known as the Coordinated Program. Why was it devised? Why did it end?

The MGH School of Nursing had long been entitled to its reputation as an outstanding hospital-conducted school when in 1946 the first students entered the Coordinated Program. For more than 25 years there had been a growing recognition in the United States that more than the traditional program of nursing education was needed if nurses were to be prepared well for the increasing responsibilities imposed by advances in medical science and the enlarging scope of opportunities in nursing. Leadership positions were beginning to require that nurses have a sound education on which to base advanced preparation.

Some college graduates had entered the MGH School of Nursing in nearly every class for many years. These women have made special contributions to nursing. Similarly, the graduates of the Vassar Training Camp in World War I and the Yale University School of Nursing have demonstrated convincingly that the additional maturity, the well disciplined minds, and the breadth and depth of education of college graduates were not only valuable but increasingly essential to the appropriate growth of nursing. Many leaders had come to believe in a curriculum which combines liberal arts and nursing education. In Boston by 1946 there were three such programs, which granted after four or five years the degree of bachelor of science in nursing, or bachelor of science in the case of the longer program.

At MGH, Miss Sally Johnson, Director of the School and Nursing Service; her assistant, Miss Ruth Sleeper; and members of the faculty wanted the School to play its proper part in preparing soundly educated women for positions in nursing. The road to the realization of this goal was tortuous and difficult. The institutions most likely to be interested in nursing education already had their own degree-granting programs. The colleges of liberal arts in the greater Boston community were eliminating all traces of vocational education in the undergraduate years. Finally, a plan was devised with Radcliffe College, which had been our first and natural choice because of the interrelationships between the MGH and the Harvard Medical School.

This plan was unique in the way its design permitted young women to combine a full liberal arts education with preparation for nursing. During the four years at college, each student majored in whatever was the field of her choice. In addition, preprofessional courses were studied at both the college and the School of Nursing so that the preclinical requirements were completed by the time the student was granted the bachelor of arts degree. During the undergraduate years, two summer terms of 8 weeks each were utilized for the study of two sciences basic to nursing, together with the introduction to nursing.

The clinical period of one year and ten months began in late June. It included Medical and Surgical Nursing and the Surgical Specialties, Obstetrical Nursing, Pediatric Nursing, Psychiatric Nursing, and Public Health Nursing. These courses and the associated nursing experiences were obtained at the following hospitals: MGH, Boston Lying-in, Children's Hospital, and McLean. Field experience in Public Health Nursing was obtained through the cooperation of the Visiting Nurse Association of Boston and the Health Department of the City of Boston. That the students had superior facilities for learning experiences in college and health agencies has always been acknowledged.

Sylvia Perkins, RN

The diploma of the Coordinated Program of Radcliffe College and the MGH School of Nursing was granted after the successful completion of all of these experiences. The diploma was signed by the President of Radcliffe College, the Chairman of the MGH Board of Trustees, the Director of the MGH, and the Director of the MGH School of Nursing.

The nursing curriculum was approved by the Massachusetts Board of Registration in Nursing. The faculty of the Program, separate and distinct from that of the diploma school after the earliest years, obtained approval of many changes and innovations in keeping with the trends in college programs for nursing and in line with the aims and needs of this particular curriculum. All schools of nursing in every one of the United States must be approved by a state board of registration which sets standards for faculty, curriculum, and the like.

Even in the initial planning stage when consultation was given by the National League for Nursing Education to the Program committee, composed of executive representatives of the College and the Hospital, it was realized that accreditation of the Program by the League was impossible. One of the basic tenets of that organization holds that to be eligible for accreditation, a college or university must assume the same responsibility for its school of nursing that it does for all other schools. Moreover, all faculty are to be appointed by the college, and to be eligible for the same duties and responsibilities as their associates. Neither of these conditions was ever met in the Coordinated Program.

Failure of a program to meet accrediting standards for any period of time interferes with recruitment of students and new faculty. It cuts the faculty off from participation with their peers in the appropriate department of the League. In addition, the faculty of the Program were largely unknown at the College. At MGH, differences in philosophy and in opportunities to conduct a completely educational program tended to separate the faculties of the diploma school and the Coordinated Program.

Why were these undesirable conditions essentially written into the Program? This was to be an experiment. Great hopes were held by those on the eastern shore of the Charles River that development might occur which would reduce any initial disadvantages and limitations.

How did students learn about the Coordinated Program? Initially, some brochures were devised cooperatively and published by Radcliffe. All the students were approved for admission by Radcliffe and if applicants wished also to enter the nursing program a joint committee from the College and the Nursing School gave its approval. There were impediments to recruitment. The Program did not appear on the list of schools accredited by the National League for Nursing

Continued on Page 8

Six graduates of 1966 MGH Course for Directors of Hospital Volunteers receive certificates from Dr. Ellsworth T. Neumann, Administrator of MGH. Left to right: David L. Ramsay, Calgary General Hospital, Calgary, Canada; Mrs. Joyce P. Carroll, RN, Laconia Hospital, Laconia, N. H.; Mrs. Jean Bawden, Carson Tahoe Hospital, Carson City, Nev.; Dr. Neumann; Mary Ruth Wolf, Director of Volunteers and founder of the course, MGH; Mrs. Gudrun B. Howe, Faulkner Hospital, Boston, Mass.; Mrs. Elizabeth A. Houlihan, Mass. Eye and Ear Infirmary; and Mrs. Phyllis R. Hollinshead, Winchester Hospital, Winchester, Mass.

Program . . .

Continued from Page 7

and sent to guidance counselors in high schools. Radcliffe was not associated with a nursing program in the minds of applicants, alumnae, or school counselors. A certain reticence about the Program appeared to occur when some college representatives were making recruitment visits to schools. On its side, the MGH School of Nursing was restricted by the existing system of recruitment in Massachusetts to speaking of nursing in general terms, while the colleges which conducted schools of nursing were free to recruit under their college plan. The availability of some scholarships offered by both institutions brought the Program to the attention of some applicants.

The arrangement of the preclinical courses made it obligatory for a student to enter the Program not later than her sophomore year. Most students who entered Radcliffe with the intent to study nursing had romantic and hazy ideas of nurses, their education, and the opportunities open to them. Public health nursing was almost unknown, for example. The variety and challenge of courses offered by Radcliffe had not been fully grasped. Some students, however, were well informed and highly motivated. They interpreted their interest in nursing and the Program to members of the college administration and to other undergraduates. They risked ridicule and scorn by so doing, but they recruited a number of girls for the Program who would never have heard of it otherwise.

Twenty-three of the 28 Radcliffe students who completed the Program entered under the original plan as freshmen or sophomores. The other five girls entered the revised Program after 1959. Some were undergraduates at Radcliffe when their decision was made; others had already graduated.

The picture of enrollments and withdrawals in the first 13 years includes one highly significant fact: once embarked in the clinical period of the course, no student ever withdrew. There were many reasons for the earlier shift of interest from nursing to other fields. While their validity was recognized, there were built-in dilemmas that prevented correction, if, indeed, there had been sufficient motivation in some to complete a program nearly six years long. Some students left college and the Program; others stayed in college but dropped nursing. One student, who withdrew during college because academic and social pressures were more than she could handle, entered the revised Program after graduation from Radcliffe and was most successful.

In 1956 the MGH and Radcliffe acted upon the recognized need to have the Program studied. Mr. Everett C. Hughes, a sociologist well known for his studies of professional occupations, was invited to direct this study, which was financed by MGH, Radcliffe, and the Rockefeller Foundation. Mr. Hughes knew the significant literature concerning the needs for development and change in nursing education. *Nursing and Nursing Education in the United States* (1923), the report of a valuable study financed by the Rockefeller Foundation; E. L. Brown's *Nursing for the Future* (1948); and Margaret Bridgman's *Collegiate Education for Nursing* (1953) all stressed the need for changes in nursing education.

Miss Brown, an anthropologist who had scrutinized other professions before examining nursing, recommended that all programs preparing for nursing should be developed within and made part of the higher education system in the United States and should be organized, administered and controlled under the same kinds of auspices and supported from the same sources that are now provided for other occupations. The Hughes Study includes an interesting discussion of the problems inherent in fulfilling this recommendation.

The findings and conclusions of Mr. Hughes and his group strictly pertinent to the Coordinated Program cast light on issues that had been suspected by the parties to the agreement and by the students, though not simultaneously or clearly. In brief, on the basis of obvious need in nursing for such a program, the recommendation was made to eliminate some of the problems identified above by revising the plan so that graduates of additional liberal arts colleges could be recruited, the length of the curriculum be shortened, and the caliber of instruction be made more appropriate for college graduates.

Even while the Hughes Study was in process, changes were being made in the Program. The faculty were continually challenged by the intellectual ability of the students, by their reactions to antiquated educational practices characteristic of traditional nursing schools, and by their needs to have their interest in nursing fortified during the four college years. Another influence was derived from the temporary association of the Simmons College School of Nursing with the Coordinated Program. This was a period of development and change for many nursing programs.

For decades, students enrolled in the nursing course at Simmons were melded with diploma students in various hospital programs after the first two years at college. A few years after the Coordinated Program was initiated, and the number of students having remained small, it was considered appropriate to have the Simmons faculty consider the feasibility of entering into cooperative arrangements whereby their students would join those in the Coordinated Program so that the different program might be available to them. Each institution supplied some instructors for nursing courses taught at the MGH, while Simmons provided instruction in Psychiatric Nursing at the McLean Hospital, and instructors from both programs cooperated in the teaching of Public Health Nursing.

Strong bonds of mutual regard developed between the two faculties; both profited from the association. The stresses and strains of so much necessary adaptation in the curriculum and some differences between the two groups of students produced some undesirable results. However, for a while the larger classes, the economies, and the partial identification of Coordinated Program faculty with some college program offset the disadvantages. In the natural evolution of the nursing school at Simmons College, complete separation from the Coordinated Program took place. Instruction in Psychiatric Nursing was purchased by the MGH from Simmons until it became possible to appoint an instructor for the students in the Coordinated Program.

The appointment of faculty for every nursing course in the Program was realized by 1961. However, finding teachers for the preclinical sciences presented another type of difficulty throughout the years. By policy, Harvard faculty may not teach elsewhere; therefore it was necessary to seek other teachers for Microbiology, Organic Chemistry and Biochemistry, Anatomy and Physiology. Fortunately, an excellently prepared teacher of Chemistry was on the faculty of the MGH School of Nursing. It must be admitted that the courses enumerated here are taught within Harvard at the Medical School and that in addition to formidable prerequisites, the selection of content in both depth and scope which is appropriate for a medical student is not identical with the needs of even the college-educated student of nursing. In many instances men or women who were Fellows at Harvard were employed in the Program and taught exceptionally fine courses. For other courses, teachers of full professorial rank were available from other institutions. However, no matter how excellent the courses, if faculty had no time to become well acquainted with the aims and content of the whole curriculum, constructive planning was out of the question. It was rare to have the same instructor for more than three terms. Their contribution to the learning and morale of the students was inestimable nonetheless.

It can be seen that the problems of the years from 1946 to 1959 had to do with recruitment of students and appointment of faculty; with dissatisfaction and impaired student morale; with complications and discontinuities among the nursing faculty, coping with their own pressures and blocks to progress; with failure to have appropriate relationships with the proper parent organization; and with the impossibility of meeting the criteria for accreditation by the National League for Nursing. It should be stated unequivocally here that the faculty of the Coordinated Program believed in and continue to support the League in its choice of criteria for accreditation of baccalaureate and higher degree programs.

Sylvia Perkins, RN
Asst. Director, School of Nursing
Chairman, Coordinated Program

(To be concluded in next issue)

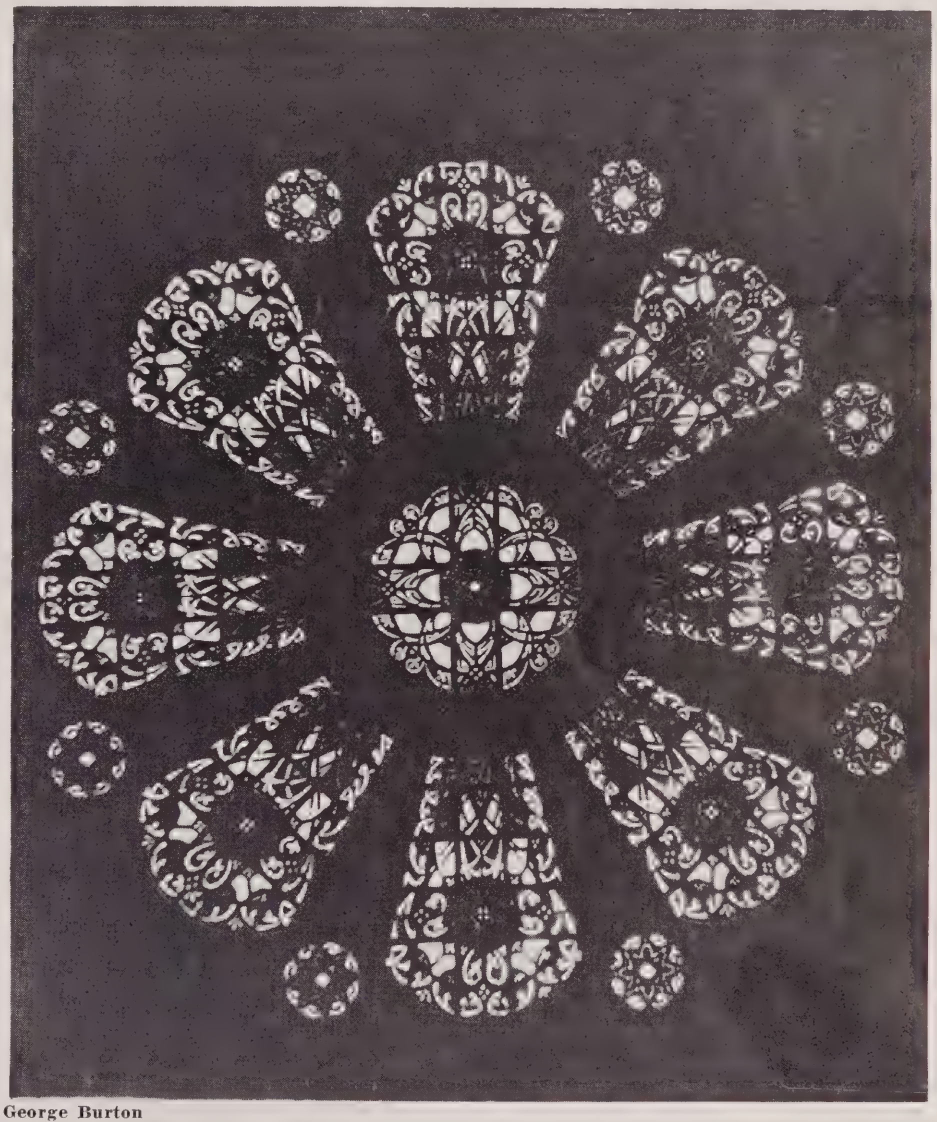
The NEWS of MGH

Vol. 26, No. 2 Boston, Massachusetts March-April 1967

Capsule Irradiator Tried Clinically in Arteriovenous Shunt

Irradiation for years has been a standard approach to the treatment of malignant disease, and the ability to direct the ionizing radiation to a specific tissue considerably enhances the effectiveness of this approach by sparing undiseased organs. One of the difficulties in controlling malignant tumors of the blood stream such as leukemia by radiation has been the impossibility of localizing the irradiation to the blood itself without irradiating other parts of the body. In the past, various forms of radiation therapy have been tried with the irradiation of bone marrow and spleen by means of x-rays and radioisotopes, but large adjacent areas were of necessity included in the field of radiation. This problem has been largely solved by the work of Dr. Cronkite at the Brookhaven National Laboratories, where for the past five years techniques of irradiating the blood circulated in an extracorporeal arteriovenous shunt have been explored.

This developmental work, done largely in experimental animals, has recently been applied to patients, with important practical and theoretical implications. One of the difficulties encountered in irradiating the blood in an extracorporeal shunt employing a powerful source of gamma rays is the ponderous and weighty lead shielding necessary to protect the patient from scattered lethal irradiation. Consequently, only intermittent periods of irradiation may be employed because the patient is temporarily immobilized next to a fixed and shielded source of gamma rays such as a Co-60 bomb.


George Burton

The Rose Window in the Chapel (story on page 8)

This report presents the initial stages of the development of a portable source of radiation used in an arteriovenous shunt. Strontium 90 is placed in a radioapplicator which is cylindrical in shape and measures 20 mm in length and 3 mm in diameter. The applicator contains 300 microcuries of strontium 90 and is placed in a plastic capsule through which the blood circulates around the source of radiation. The walls of the capsule plus the layer of blood surrounding the radioapplicator are sufficient to absorb the radiant energy and avoid the hazards of total body irradiation while the circulating blood is receiving a substantial dose. The beta rays are potent with a maximum energy of 2.2 million electron volts, but their nonpenetrating nature results in the layer of blood absorbing virtually all the energy. The capsule and applicator together weigh about 2 ounces and cost less than $400, and the source can be used over and over again. Studies in a variety of animals are part of a concomitant program for investigating this technique experimentally while clinical trials are being cautiously evaluated.

This technique was used in a patient recently admitted to MGH with chronic lymphocytic leukemia and with a white cell count in the range of 40,000 cells per cubic millimeter. An arteriovenous shunt was constructed between vessels at the wrist, and a plastic capsule containing the applicator was placed in the circuit. The shunt for the first 15 days contained one source and for the next 15 days it contained two sources, doubling the dose of irradiation. The total blood volume received 275 or 550 rads

Continued on Page 2

Capsule Irradiator . . .

Continued from Page 1

per day, and the lymphocyte count gradually diminished from 40,000 to less than 1,000 cells per cubic millimeter. Other elements of the blood, such as the red cells and polymorphonuclear leukocytes, did not change significantly, and there was no evidence of hemolysis, damage to the plasma proteins, or alterations in the clotting properties of the blood. Studies of the chromosomes seen in cultures of the lymphocytes, arrested in mitosis by the use of colchicine, revealed a number of abnormalities demonstrating a radiation effect in lymphocytes that otherwise appeared morphologically normal.

This study allows us to conclude that an elevated peripheral blood lymphocyte count may be reduced by means of continuous radiation from a small applicator that permits the patient to be ambulatory. The eventual role of this type of treatment in the therapy of malignant diseases involving the blood cells is currently under investigation.

The role of the lymphocyte is proving to be an extraordinary one, and research today has defined this role in a wide variety of normal and diseased states. Attention has been directed to the critical role of the lymphocyte in the immunological defense an individual mounts when exposed to foreign protein or foreign tissues. The lymphocyte is the courier and repository of immunological information. The lymphocyte wanders about the body spending various portions of its life in the blood stream, in the tissue spaces, or sequestered in the spleen, thymus, lymph nodes, and similar organs. The population of lymphocytes in the blood stream in an adult is about 10^{10} cells, and these cells are in some sort of steady state of exchange with the lymphocyte population in the rest of the body. Therefore, irradiation of the lymphocytes in the peripheral blood is followed by a striking reduction of the cell density in lymphoid organs such as the spleen, thymus, and lymph nodes. Consequently, we have an effective means of modifying the lymphocyte population in the entire body by irradiation of the peripheral blood. This in turn suggests new opportunities in the control of diseases with an immunological basis, such as autoimmune disease, as well as the control of neoplastic disorder of the blood.

Other investigators have considerably extended our information about the lymphocyte, and the work of Gowans in Oxford, England, as well as that of Cronkite at the Brookhaven National Laboratory, should be mentioned as presenting new knowledge in regard to the life cycle of the lymphocyte and its central role in the immunological processes of the body.

Benjamin A. Barnes, MD
Department of Surgery
MGH and HMS

The above report was presented at a press writers' meeting conducted on April 1 at Palm Beach, Florida, by the American Cancer Society.

Homayoun Kazemi, MD

New Head Appointed For Pulmonary Unit

Dr. Homayoun Kazemi has been appointed Chief of the Pulmonary Unit to succeed Dr. K. Frank Austen, who is now Physician in Chief at the Robert B. Brigham Hospital. Dr. Kazemi will be assisted by Dr. Denise J. Strieder.

Dr. Kazemi, a native of Teheran, Iran, earned the M.B. degree at the University of London and the M.D. degree at the College of Physicians and Surgeons, Columbia University. He served an internship and assistant residency in Cooperstown, N.Y. at the Bassett Hospital, which is affiliated with Columbia. He then spent two and one-half years as an American Heart Association research fellow in the pulmonary laboratory of Dr. John Mithoefer at the Bassett Hospital.

In January 1963 Dr. Kazemi came to MGH as a Resident in Medicine, and one year later was appointed a Clinical and Research Fellow. In July 1964 he was appointed to the Active Staff.

A new phase in the development of the Pulmonary Unit begins with the arrival and installation of the new Allis-Chalmers cyclotron, which will be housed in the heavily shielded sub-basement of the Harold Whitworth Pierce Cardiopulmonary Research Laboratories. This machine, described in the February issue of *The NEWS of MGH,* will produce short-lived isotopes for clinical investigation in pulmonary physiology and related areas.

The operation of the cyclotron will be the responsibility of the Physics Research Laboratory under the direction of Dr. Gordon Brownell. Among the other units that will utilize the products of the cyclotron are the Cardiac Unit, headed by Dr. Edgar Haber, and the Surgical Cardiovascular Unit, headed by Dr. W. Gerald Austen.

Sixth General Hospital

The Sixth General Hospital, the MGH unit in World War II, was activated at Camp Blanding, Florida, on May 15, 1942, under command of Col. Thomas R. Goethals, MC. On the same date, most of its original officers and nurses convened at MGH, were placed on active duty status, and began the train trip to Florida. On February 19, 1943, advance detachments of the Sixth debarked at Casablanca, French Morocco, and on February 27 the Sixth admitted its first overseas patient. Subsequently, it was stationed in Rome and Bologna, and was deactivated on September 15, 1945, at Leghorn, Italy.

As the 25th anniversary of its activation draws near, the officers of the Sixth and their wives will converge on Plymouth, Massachusetts, for a reunion on May 6 and 7. The highlight of the entertainment will be a half hour of movies taken in 1942 by Dr. John B. McKittrick.

The memoir of the Commanding Officer of the Sixth General Hospital which begins on page 3 opposite, is indeed appropriate. It was written by his brother George, a retired colonel of the Corps of Engineers, USA, who was an outstanding MGH Volunteer from November 1961 through June 1964.

The NEWS of MGH

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A Memoir of Thomas Goethals, MD

Tom was born the younger son of then Lieutenant George W. (later of Panama Canal fame) and Effie Rodman Goethals, December 14, 1890, at New Bedford, Mass., in the home of his maternal grandfather, Captain Thomas R. Rodman, Harvard Class of 1845, classical scholar, and Union veteran of the Civil War. The latter proved an important influence to shape Tom's later courses at Harvard and to inspire his active entry into two wars and voluntary offer to serve in a third.

Prior to his college days, his father had to change his Army station five times, so that his early education was essentially from a mixture of the public schools of Washington, D.C. and Newport, R.I.; with preparation for his Harvard entrance examinations at University School, Washington.

Entering Harvard in 1908, he completed work required for his bachelor degree in 3½ years, *cum laude*. Choosing a career in medicine, he graduated from Harvard Medical School in 1916, second in a class of 76, *magna cum laude*.

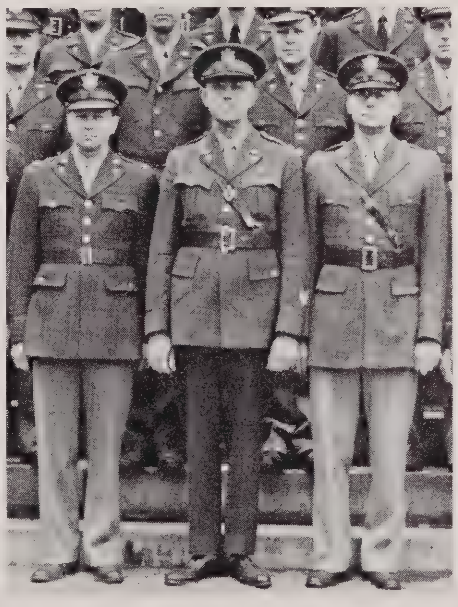
His vacation periods were spent in a trip to Germany, one around South America, and annual visits with his parents in the Canal Zone, where he was a frequent observer at the various Ancon Hospital Clinics for latest developments in surgery and tropical medicine. He would also accompany survey parties into virgin jungle to see native life on the spot and witness first hand some of the pests of jungle existence.

On attaining his MD degree, Tom was accepted as surgical "house pupil," as then termed at MGH, while being offered the post of assistant to the well known obstetrician, Dr. Franklin S. Newell. Certain at that time the United States was bound to get into World War I, he had enrolled in what was to become Base Hospital No. 5, noted as the second of our units to go overseas and the first attached to the BEF. He reported for active duty May 6, 1917 and the unit shortly found itself in France, where he was a ward surgeon caring for severely wounded British soldiers. His original C.O. was Major Robert U. Patterson, to whom he was devoted and who influenced his future active career. Just in time for the Argonne campaign, Tom was transferred to U.S. Mobile Hospital No. 6, First Army, AEF, with headquarters at Deux-Nouds. Most of this time he was commanding a field hospital between Varennes and Cheppy as the wounded poured in from Montfaucon and other famous points of resistance in that operation. His active service closed January 18, 1919 in Washington, whither he had returned soon after the armistice, with the same 1st lieutenant's bars worn when he was activated, in accord with Medical Corps promotion awards of that era.

After nearly two years' absence, he was fortunate in rejoining the House Staff of MGH while Dr. Newell's offer still held good, and he completed also a six-month internship at Boston Lying-in Hospital. On June 3, 1919 he married his sweetheart, Mary Addison Webb, of Washington, D.C., in St. John's Church. Three sons were born to them: Thomas Rodman, Jr., Henry Webb, and Peter Randall. None followed his father's profession.

He opened his own office in September 1920, although his association with Dr. Newell continued for some time after. His patients brought him to many of the best known hospitals of Greater Boston, but it was at the Lying-in Hospital and MGH where he was to be found much of his time till the latter closed its obstetrical beds in the late forties and his services as Consultant in Obstetrics at MGH were completed. He taught many years at Harvard Medical School, climaxing there by becoming Clinical Professor of Obstetrics, Emeritus, in 1957.

In 1925 his former C.O. in France had become Major General Patterson, Surgeon General of the Army, who persuaded many former officers to join the Organized Reserves. Tom did so, even taking half of some of his usual month's vacation on active duty. This kept him in line to command, as a colonel, the proposed Sixth General Hospital, organized largely from MGH personnel, and sponsored early in 1940 by vote of both Staff and Trustees. In May of 1941 he closed his office, remarking he never expected to have a private patient again, and went on active duty with the Surgeon of First Army at Governor's Island, N.Y. It was still before Pearl Harbor, but the future was obvious to any who could rationalize. In May 1942, the Sixth General Hospital was activated at Camp Blanding, Fla.



Detail from group photograph taken in front of Bulfinch Building on May 15, 1942. From left: Maj. Edward Bland, Col. Thomas Goethals and Lt. Col. Donald King.

He wrote, "I served as C.O. of this unit almost 3 years, covering its training period at Blanding, its movement overseas, its first station for active operation at Casablanca, French Morocco, and its second station at Rome, Italy."

Tom's active duty tours of the preceding few years had prepared him to whip his outfit into shape in quick time. He was strict on discipline. Before permanent messes could be set up and chow lines were still used, Tom would be seen, mess kit and tin cup in hand, taking his place at the end of the line and working up to the field kitchen the same as an enlisted man. If some junior officer was seen trying to barge in near the front end, he was duly ordered back to the rear end of the line by his C.O. When Maj. Gen. Everett S. Hughes, General Eisenhower's deputy and trouble shooter, inspected the outfit at Casablanca after it was taking in wounded, he gave it high praise, — then took the C.O. out to watch a soldiers' baseball game from the bleachers.

After the collapse of the Italian front, one component of the Sixth after another was detached and sent to staff general hospitals in other theaters, so that eventually Tom found himself without a job and returned home as a casual to command Lovell General Hospital at Fort Devens, Mass. from March 1945 to the start of his terminal leave the following December.

In February 1946 he resumed obstetrical practice in Boston and, against his earlier doubts, patients began to come to him again, and by the end of 1947 he was quite as active as in 1940. He also accepted a new 5 year commission in the Medical Corps Reserve, and in 1949 was promoted to Brigadier General and assigned to command the 803rd Hospital Center, conducting two 15 day field training periods, one of the latter at Fort Devens. On his 60th birthday in 1950 he was placed on the retired list under the new Army regulation. When the Korean War broke out he again volunteered for active duty, but was turned down, probably

Continued on Page 4

Dr. Goethals . . .

Continued from Page 3

because he was then only 4½ months from mandatory retirement age for a Brigadier General.

Traveling was one of his hobbies. In 1954 he took a trip to the Canal Zone to represent the family at the dedication of a memorial fountain to his father. Later in the same year he visited Mexico City. Other than as mentioned, his vacation periods were spent at his old farm house in Lambert's Cove on Martha's Vineyard.

In January 1956 a painful throat condition was diagnosed as cancer of the larynx resulting in a radical laryngectomy. His recovery and patient, cheerful fortitude were remarkable. Within 60 days of the operation he was visiting in Las Cruces, N.M., sitting on a sofa surrounded by half a dozen local members of his profession and talking to them in the only way he then knew how — by pad and pencil. Soon the electric device of a battery and a contact plate held beneath the jaw bone was developed and allowed him freer conversation in a low, buzzing monotone; but this was such a handicap both with patients and operating room procedure that he finally closed his office and practice for good in October 1957.

After removal of his larynx he was an enthusiastic visitor to our principal U.S. battlefields from Concord to Vicksburg, especially those of the Civil War where he got right down to divisional movements, often to the edification of some official guide. But he never had a chance to go over his overseas stamping grounds, for he and Mary sacrificed a planned trip to Europe early in 1961 to go to New Mexico to take care of the home and affairs of his brother during the latter's long serious illness. It was a characteristic service of unselfishness by both that could never be repaid.

In the summer of 1961, just 5½ years after his larynx cancer, he developed severe abdominal pains, soon diagnosed as from a growth in the pancreas. Removed by surgery in September, it was found malignant. His family was encouraged by his immediate postoperative condition, for he regained strength and became energetic enough to drive his own car again, even as far as Lowell for Thanksgiving. In mid-December, however, he began to fail, and the downgrade became steeper all the time until "Release from Quarters" sounded early in the morning of March 23, 1962 at his Brookline home. His courage and cheerfulness were remarkable. He received and talked to old friends right to the last — a living lesson of superb fortitude to all who visited him. His remains are buried in the old Lambert's Cove cemetery only a quarter of a mile from the home he loved so well.

He had keen wit and a high sense of the ridiculous, always the life of any group of friends. He took life as it came, with many likes and few antipathies. The latter are best summarized in his own wry entry in his 25th Class Report, when he wrote, "I am singularly free from prejudices save against cauliflower, literal and pompous people, bridge, aesthetic dancers, and the seats usually assigned me at the Yale football game." Even during his final days, he quipped to a visiting classmate, "You know I'm not the man I used to be, and never was."

He was a member of several learned medical societies and wrote extensively on obstetrical and allied subjects for various medical periodicals. Most important is a chapter on Breech Presentation in a Textbook of Obstetrics by Duncan E. Reid, MD, Professor of Obstetrics at Harvard Medical School.

Soon after his death, a committee was formed to alter and renovate a section of Richardson House, Boston Lying-in Hospital, as a permanent memorial to his honored memory, and where such a large number of his patients had been cared for.

In most walks of life — notably in the medical, military and teaching professions — one's superiors see those traits in a man which lead to his promotion and advancement. Tom's associates and friends get a much wider view of the whole as when the Boston Lying-in "lost one of its most distinguished doctors and a brilliant, conscientious teacher. His patients lost 'their' doctor, and his friends, a man whom they held in great esteem and affection." But it takes subordinates "who saw life steadily and saw it whole" to make the broad horizon appraisal. His soldiers understood him; so did his pupils and young doctors seeking his advice. It was a Harvard Medical School class which made appreciation most articulate in dedicating to Tom their *Aesculapiad:*

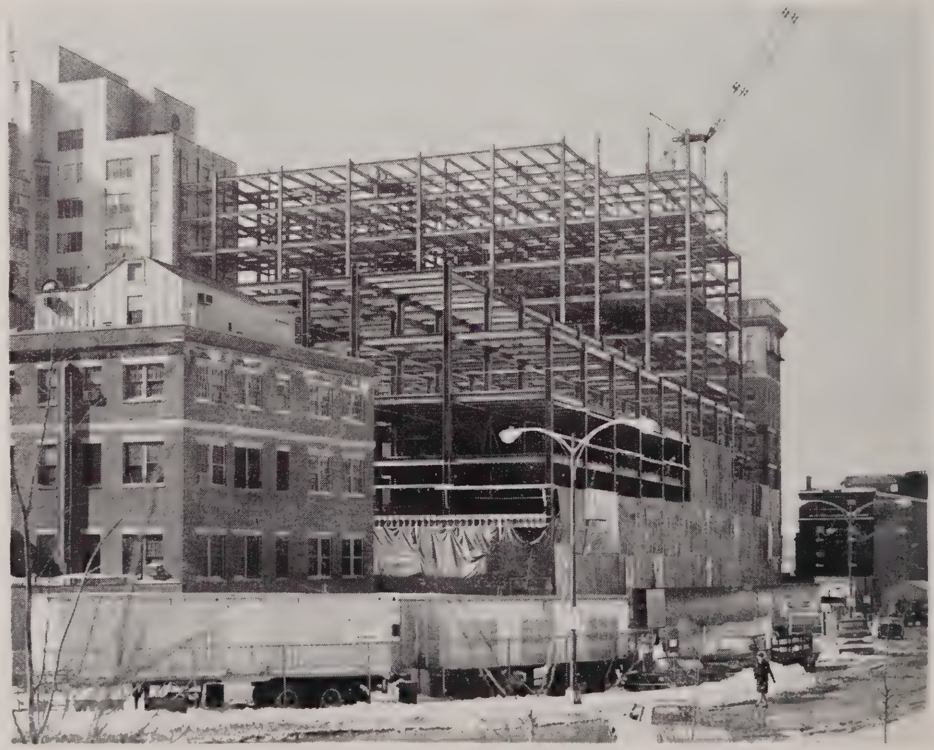
"With this dedication, the Class of 1956 expresses its sincere gratitude for all your efforts in its behalf. Having met with you in small groups, its members have come to know you in a very personal way as a tireless, clear-thinking, cheerful and considerate physician, teacher and friend."

— Brother

Communications Center

The communications explosion at MGH reached by January 1, 1967 a total of more than 50,000 telephone calls daily over 1,861 lines and 2,565 sets. The average daily number of page calls has increased from about 550 in 1965 to more than 1,200 at present. In rush periods the page operators may handle as many as 130 calls hourly.

The Communications Center now occupies splendid new quarters on White 14 and requires a staff of eleven. It is headed by Evelyn Dunn, Communications Coordinator. One of the chief operators is Mrs. Alice Harrington, who has been an MGH employee for approximately 45 years.



Steel frame for the Surgical and Special Services Building

The character of the probing medical scientist is well portrayed in this photograph of Dr. Benjamin Castleman, taken by David A. Lang, a student in the MGH School of Medical Illustration.

Dr. Castleman Honored

Dr. Benjamin Castleman, Chief of the MGH Department of Pathology, and Professor of Pathology at HMS, has been awarded the honorary degree of Doctor of Medicine by the University of Göteborg in Sweden, in recognition of his accomplishments in the field of endocrine pathology. He received this honor at the University's traditional *Doktorspromotion* ceremony last October 22. The citation was read in Latin, and the ritual included a two-gun salute as the *Promotor* lowered a fluted silk top hat on the recipient's head and placed a gold ring on the left index finger.

Two years ago Dr. Francis O. Schmitt, a professor at MIT and a member of the MGH Board of Trustees, received a similar award at Göteborg.

MGH Briefs

Dr. Kurt J. Isselbacher, Chief of the Gastrointestinal Unit, has been appointed to a 3-year term as Chairman of the MGH Committee on Research, beginning on March 1, 1967. The scope of research at MGH is evident from the fact that in 1965 approximately 880 research projects were under way or completed in 62 laboratories and units by 799 staff investigators, fellows, and assistants. More than 900 papers by these researchers appeared that year in journals.

Dr. Paul D. White, a member of the MGH Board of Honorary Physicians, is the subject of an oil portrait painted by Alfred Jonniaux and recently donated by the artist to the National Library of Medicine.

Dr. Claude E. Welch, Visiting Surgeon, has been named chairman of a 28-man standing committee on surgical education in medical schools by the Board of Regents of the American College of Surgeons. Other MGH surgeons on this committee are Dr. Edwin F. Cave and Dr. Oliver Cope.

Dr. and Mrs. Bradford Cannon will be hosts for the annual picnic for international visitors and house officers on May 30 at their country house in Lincoln, Mass.

Dr. Dana L. Farnsworth, a member of the MGH Board of Consultation, and Director of the Harvard University Health Services, delivered the opening address at the 8th annual meeting of the Academy of Religion and Mental Health in Boston on April 18. The Academy is a multifaith organization with more than 4,000 members from the professions of religion, medicine, and behavioral science.

The Spring Dinner Dance conducted by the Service League and the Distaff Club will be held on May 20 at the Harvard Club. The co-chairmen are Mrs. Eldred Mundth (Distaff) and Mrs. George Baker, Jr. (League).

Miss Adelaide M. Coleman has received the fifth Jessie Harding Award for Volunteer Services at the MGH. She is now in her ninth year as a Volunteer on the wards.

Dr. Francis D. Moore, a member of the MGH Board of Consultation, and Moseley Professor of Surgery at Harvard, has been elected an Honorary Fellow of the Royal College of Surgeons of England. He received the honor on April 4 in London, and also delivered an address at the Lister Centenary celebration.

Miss Mary Ruth Wolf, Director of the Volunteer Department, has been conducting a series of meetings at Charles River Park to explain the opportunities for engaging in volunteer service at MGH. By the end of March, 45 residents of Charles River Park had contributed 6,025 hours of service.

The Employees' Spring Dance was held on April 21 in the Louis XIV Ballroom at Hotel Somerset. Co-chairmen of the committee were Mal McLean of the Electric Shop and Tony Giarrusso of the Maintenance Department.

The McLean Hospital Auxiliary is planning a benefit party on June 2 — "Opening Night at the Circus."

Several hundred new Wedgwood Queensware service plates, designed originally for the 150th anniversary of MGH, are again available at $4.25 each through the General Store and Gift Shop conducted by the Ladies Visiting Committee. The design of this 10½ inch plate shows a view of the original Bulfinch Building and wharf, enclosed within a clover border — all in MGH blue.

The Coordinated Program in Retrospect

Part 2

Part 1 of this article appeared in the February issue of The NEWS of MGH *and covered the history of the Coordinated Program from its beginning in 1946 until 1959. The conclusions of a critical study of the Program made in 1958 by the sociologist Everett C. Hughes had been considered carefully. Although his recommendations could not be implemented within Harvard University, a new plan and a new curriculum were instituted.*

The findings of Mr. Hughes and the stimulating, helpful conversations held with him and his assistants fostered the needed impetus to completely redesign the curriculum. Since there were still some undergraduates at Radcliffe who signified their intention of completing the program, the plan in effect from 1946 to 1959 was phased out gradually. It now became the role of the nursing faculty to exert pressure on the wavering and indecisive among those enrolled to decide not to finish the nursing curriculum; others stayed.

For admission under the new curriculum, applicants were required to be graduates of liberal arts colleges with creditable achievement. No specific major or course requirements were made, except that a course in general or inorganic chemistry must have been completed satisfactorily. Through the young woman's own college or through Harvard or the Massachusetts Institute of Technology, an applicant already graduated from college without chemistry was permitted to present evidence from the head of the chemistry department that she had completed creditably by a tutorial arrangement the equivalent of a course in general chemistry. The chemistry instructor on the faculty of the Coordinated Program guided the selection of content toward a desirable basis for advanced courses. Thus, one of the biggest obstacles to admission was overcome.

Recruitment activities were intensified in kind and distribution. Deans and placement officers in Eastern women's colleges were sent newly prepared materials. Even undergraduates in the junior and senior years at Radcliffe began to apply. The Committee on Admissions of the Coordinated Program now included a member of the preclinical sciences faculty, a doctor of medicine who served also on the Harvard Medical School Committee on Admissions, the Chairman and one nurse faculty member of the Coordinated Program. Academic standing and personal qualifications of students were improved somewhat because of the increased number of applicants. Though the number admitted each year stayed small, the size of the classes increased, so that an upper limit was placed to avoid jeopardizing the quality of the instruction, particularly in the clinical nursing courses. The learning experiences were carefully selected by the clinical faculty. The teaching was based on truly educational aims. Superior learning opportunities were afforded by field agencies.

The student now entered the Program in the last week of June. She spent the summer term studying two courses: Anatomy and Physiology, and Organic Chemistry and Biochemistry. Vacations to a total of ten weeks were interspersed among the remaining two calendar years. The courses in the fall term were Microbiology, Human Growth and Development, Cultural Anthropology, Principles of Nutrition, and Foundations of Nursing.

It should be noted that sound nursing courses must be based on the students' knowledge of physical, biological, and social sciences. The faculty have found that no other factor so promotes unintelligent, unsound nursing care as having to teach nursing care and procedures to students who have limited scientific knowledge ready to use. This obstacle to sound learning was nearly overcome under the new Program. Many nursing practices are based to some degree on an understanding of principles derived from Microbiology, and so the course in Foundations of Nursing could not be designed as well as was desired.

Another persisting weakness stemmed from the absence of members of the faculty qualified to implement the inclusion of concepts of mental health and interpersonal relationships in every course, and from the lack of a highly qualified nurse faculty member for psychiatric nursing. In two terms of the revised Program, however, a psychiatric nursing instructor demonstrated what might have been accomplished among faculty and students. Reasons have been indicated in Part 1 of this article to show why the Program could not hold as many qualified teachers as were needed.

In terms 3 through 9, nursing courses in the following sequence were given: Medical-Surgical Nursing I and II, Maternity Nursing, Psychiatric Nursing, Nursing of Children, Public Health Nursing, Medical-Surgical Nursing III. Courses in the History of Medicine, Public Health, and Nursing; Principles of Learning and Teaching in Health Education; Principles of Administration; Nursing during Disaster; and Contemporary Professional Nursing were distributed throughout these terms. Three courses in any term were the maximum. Throughout the curriculum, a strong emphasis was placed on the promotion and maintenance of personal, family, and community health and on rehabilitation. In addition to the agencies used for the major courses, students became acquainted with the programs and facilities of 43 other social and health agencies in greater Boston.

In addition to a redesigned curriculum, the courses and concurrent field experiences were improved to help the student approach learning analytically, and to develop skills and insights as independently as she was capable of doing. Self-evaluation was fostered. In order to provide time for appropriate study, and to allow the student to continue her diversified interests established in college, the hours scheduled per week were restricted to 10 to 12 hours of class or conference and 18 hours maximum of nursing experiences, which were scheduled on Tuesday, Wednesday and Thursday to allow for as much continuity of patient care as possible.

Another change was made when the new curriculum was initiated. Until 1959, students in the Program had no identifying uniform to indicate that their academic background or course differed from that of the diploma students. At first, a certain protective coloring was afforded. Ultimately, it became clear that the lack of identification was compounding the obscurity of the Program. The students were invited by the faculty in 1959 to design their own unique uniform, an enterprise into which they entered with great verve, and their designs for cap and dress were accepted. The faculty designed a pin for graduates to wear. Only those people who have worn a uniform in a setting where it has special significance can realize its effect. The fact that this was a different and separate program became gradually somewhat better understood.

The curriculum designed for use in the 1959-61 period was modified many times. The faculty found continually new opportunities for improving the teaching approach and selecting the learning experiences.

Between 1946 and September 1966, 51 young women graduated from the Program. Since 1960, 31 students graduated, of whom 21 were from colleges other than Radcliffe. There is much evidence that the friendly competition among the representatives of the various colleges had its own benefits. Failure to maintain academic standards, and lack of suitability for nursing account for the 3 students who left. It will be noted that three-fifths of all students who graduated completed the Program in the last six years.

A strong feeling developed among the students and graduates of the revised Program, as well as the earlier one, so that a remarkable esprit de corps and belief in this kind of nursing education exists among them.

However, there remains the old stumbling block of the unattainability of accreditation by the National League for Nursing, compounded by the withdrawal of Radcliffe from the arrangement. The Coordinated Program was admitting college graduates. It had been found after continuing investigation by members of the Board of Trustees and by others at MGH that the situation at Harvard would not permit a school of nursing. Also, by this time, new and more stringent regulations concerning the employment of graduates of unaccredited nursing programs had been made by some employing agencies.

Graduates of programs which prepare for public health nursing find in this field the greatest opportunities for originality, independence, and community-oriented preparation. Public Health nursing agencies have been pre-eminent in their efforts to attain sound standards. More of the graduates of the Coordinated Program chose to enter public health nursing than any other field, and they were being employed on the pay scale level for graduates of programs in which preparation for public health nursing is not a part. In one state, any public health agency which receives state monies may not employ the graduate of an unaccredited program.

Another problem arose when graduates of the Coordinated Program wished to matriculate for advanced study in nursing programs. While some graduates have been permitted to enroll for study in university nursing programs after the results of their qualifying examinations and undergraduate programs were evaluated, others have been required to take stipulated courses to meet school of nursing requirements for a bachelor of science degree in nursing.

Since no progress had been made in achieving a college or university relationship, graduates of the Program were encountering barriers to employment and continuing study. Furthermore, the lack of accreditation affected the recruitment of students and faculty. Therefore, the decision was reached to terminate the Program with the class which graduated in September 1966.

If a relationship with a univeristy should ever become possible, it is imperative that the conditions of accreditation be met. Nursing in the United States needs to have one or more demonstration centers in which educated young women study nursing under the direction of a superior faculty capable of designing and implementing an imaginative curriculum unfettered by outworn thought and practices.

G.H.J.

Would college graduates enter such a program? We believe so. And what would such nurses do? Not at once what so many people presume. The days are fortunately past when a graduate of a good school of nursing can become director of a hospital, a nursing department, or a school of nursing, or become a teacher the day after she graduates. Nursing has yet to reward the practitioner of nursing by esteem or income. There are developing presently, now that medical practice requires more of nursing than baths and poultices, opportunities for nurses with sound education and experience to take their place in clinical nursing practice where they may influence the level of nursing care by their knowledge and ability. Staff nurse experience of one year, at least, is needed as a base for this activity.

Graduates of the Coordinated Program have started, appropriately, to gain experience at the staff level. Specialization, teaching, administration, and research may be prepared for subsequently. The dimensions of knowledge, understanding, and ability which graduates bring to a nursing program based on a liberal arts education make it possible for them to function in what may truly be conceded to be a professional way. They find professional nursing a challenge to their abilities. They are eager to cooperate equally with those now unquestionably designated professional in the promotion of health, the prevention of illness, the care and rehabilitation of the sick in a variety of community agencies and among families in their homes.

Sylvia Perkins, RN
Asst. Director, School of Nursing
Chairman, Coordinated Program

David A. Lang

Mr. Thomas J. Kelly (above) formerly guarded the Allen Street Gate, and today is stationed at the Parkman Street Gate. In the picture on the left, he stands at the entrance to the MGH Power House, which was built in 1898 and demolished in 1965.

75th Vincent Show

The 75th annual Vincent Club Show, a musical comedy entitled *Facts and Figures,* was presented at the New England Life Hall from April 11 through 15, the proceeds to be turned over as usual to the Vincent Memorial Hospital. The show won very favorable reviews in the Boston newspapers.

Mrs. Richmond Holder wrote the book, and other Vincent Club members wrote both music and lyrics for all the songs. All members of the cast were Vincentonians. The show was staged and directed by Michael Douglas, and choreographed by Tommy Tune. Ruby Newman's Orchestra was directed by George Gould. The breezy plot sent federal spies on an investigation of the price-fixing racket in the beauty-aids industry, much of the action taking place on lush El Rancho Relaxo in Texas. In the traditional Vincent Drill number, the girls were costumed in white rodeo dresses and black hats. Also featured was a computer system that filed and delivered human agents.

Mrs. Edwin Hiam was chairman of the show committee, assisted by Mrs. Samuel Drury and Mrs. Ezra Stevens.

The net proceeds of the first 74 Vincent Shows total $1,439,630. The 1966 show earned $48,000. The first production earned $494.50 in 1892, and was staged by alumnae of Mrs. Shaw's School for Girls in order to aid the new Trinity Dispensary for women in the West End, predecessor of the Vincent Memorial Hospital.

Treadwell Library

The most outstanding event of the past year was the acceptance by Miss Glee A. Rundgren of the position of Assistant Librarian and Cataloger on the staff of the Treadwell Library. Miss Rundgren attended Coe College for two years and received B.A. (1964) and M.A.L.S. (1965) from the University of Minnesota.

The task of revising the Library's card catalog and, concurrently, cataloging new acquisitions and recataloging where necessary the monograph collection begun in 1958, has been Miss Rundgren's chief responsibility. The work has progressed steadily and a great improvement is evident. As a pilot project the Cabot and Evarts collections in the Cabot Memorial Room were completed first. This experience provided the guidelines to be used for the work in the Treadwell collection and catalog.

During the spring of 1966 the Library was repainted. All areas, except the Reference Room, now have Colonial gray walls with white trim and ceilings, which especially enhance the beauty of the Reading Room and give the illusion of more space in the other areas. Drapes were hung at all the windows. A new and more efficient mahogany circulation desk replaced the old one, and the bulletin boards were rearranged so that a group of historical pictures could be hung on one wall.

Staff Publications for the year 1955 were sent to the bindery during the past year. Special thanks go to Miss Bernice Sweeney, the Volunteer who worked so faithfully to get them ready, and Miss Anne Balfour, who did all the necessary typing of indexes and cards. Mrs. Hiram Crowell continues to work as a Volunteer on the Surgical Fatality Reports. During the year four volumes were bound so that they are in a more convenient form for study.

At present the Treadwell Library has a staff of five full-time and four part-time employees. The help and advice of the members of the Treadwell Library Committee, as well as many other members of the Hospital Staff, has been greatly appreciated.

For the many books and serials given to the Library by individuals and the various services we are grateful. These gifts make it possible for us to have circulating copies of the more heavily used serials. During the past year over 1,300 of those journals which we did not need were sent to other medical libraries through the Medical Library Association Exchange. A list of donors is kept on file in the Library.

Genevieve Cole, *Librarian*

In the Chapel

Pause for a moment in your hurried flight,
Gaze on the Rose Window's glorious light,
Think as to how you can do what's right,
In the Chapel.

The Chapel is for all within the walls of the Massachusetts General Hospital. It serves all kinds of people.

To the patient and his friends it offers a place where they may give thanks or ask for help.

To the devout it offers a place for prayer.

To the philosopher a place for meditation.

To the harried doctor worried about his patients a place where quiet thought may solve his problems.

To the tired nurse a place where she may rest, if only for a few moments.

To each and every person in this Hospital the Chapel says: Come, and I will share your burden.

One minute in the Chapel may
Brush all your troubles far away,
Bring joy to both your work and play,
Bring peace of mind with you to stay.
So to the Chapel come and rest,
Somehow 'twill help you do your best.

— *A friend of MGH*

Under the Rose Window

The photograph by George Burton reproduced on page 1 of this issue shows the Rose Window in the nondenominational Chapel of the MGH. The stained glass windows in the Chapel were designed by the eminent artist Charles Connick. They contain symbols which, along the west wall, represent the eight beatitudes and, in the clerestory and rear wall, represent the seven corporal works of mercy.

The Chapel was opened for services on April 6, 1941. It was made possible through the fund-raising effort of the Rt. Rev. William Lawrence, then retired Bishop of the Protestant Episcopal Diocese of Massachusetts. People of many faiths responded generously to Bishop Lawrence's appeal.

During major holidays of the various faiths, appropriate symbols and literature are displayed in the Chapel, and floral displays are provided by the Ladies Visiting Committee. Chapel concerts are sponsored by the Service League, primarily for the benefit of patients. Recorded music is provided almost daily. During the summer when the nondenominational Institute of Pastoral Care is in session, daily services of prayer are held to which all are welcome. The motto over the door reads: WHOEVER WILL, MAY ENTER HERE.

MGH Pops

MGH Night at the Boston Pops in Symphony Hall is scheduled for Wednesday, May 31. The Pops Committee, headed this year by Mrs. Austin L. Vickery, Jr., of the Service League, has again reserved all of the 1,186 seats on the main floor for MGH. This committee includes representatives from all major hospital departments and from the Service League, Ladies Visiting Committee, and the Distaff Club.

Memories of last year's MGH Night at the Pops remain vivid. The highlight of that program was the guest soloist Mrs. Alice Wilkinson, wife of Dr. Harold Wilkinson, formerly a neurosurgical Resident at MGH. She played Mozart's piano concerto in F major.

Another lady known at MGH appeared last year as soprano soloist on Wellesley College Night at the Pops. She was Mrs. Leslie Holmes, wife of Dr. Lewis Holmes, formerly a pediatric Resident at MGH.

Chapel Concerts were presented by the Service League in March and April. One concert was given by four members of the hospital family: David Alpers, MD, clarinet; William Hammond, horn; Kilmer McCully, MD, violin; and Joseph Stukas, piano.

The NEWS of MGH

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Around - the - Clock Psychiatric Service In Tilton Building

The new two-story Tilton Building, which now houses the Acute Psychiatric Service and Alcohol Clinic in the MGH Outpatient Department, was dedicated on Saturday, April 29 during a symposium entitled "The Rehabilitative Focus in Around-The-Clock Services to Alcoholic and Psychiatric Patients."

The chairman of the morning program was Dr. John H. Knowles, General Director of MGH. The two speakers were Dr. Dana L. Farnsworth, Director of the Harvard University Health Services and Oliver Professor of Hygiene, and Dr. Walter E. Barton, Medical Director of the American Psychiatric Association.

The chairman of the afternoon program was Dr. John C. Nemiah, Acting Chief of the Psychiatry Service, MGH. The three speakers were Dr. Jules V. Coleman, Clinical Professor of Public Health and Psychiatry at Yale University; Dr. Robert Straus, Chairman of the Department of Behavioral Science at the University of Kentucky Medical School; and Dr. Morris E. Chafetz, Director of the two units in the Tilton Building, and Asst. Clinical Professor of Psychiatry, HMS.

The new building was constructed at a cost of $220,000 partly with funds from the bequest of the late Elizabeth Tilton, a former member of the Ladies Visiting Committee at MGH, and also with funds provided by the Godfrey M. Hyams Trust, a committee of the Permanent Charity Fund, Inc., the National Institute of Mental Health, the U. S. Public Health Service, and the Division of Alcoholism, Commonwealth of Massachusetts.

The following remarks were delivered at the Symposium by Dr. Chafetz:

The Tilton Building at the MGH, which houses the Acute Psychiatric Service and Alcohol Clinic, is to our knowledge the first of its kind in a general hospital. In most of the nation's hos-

Continued on Page 4

John J. Fields

Chester M. Jones, MD

Honored by ACP

Dr. Chester M. Jones, a member of the MGH Board of Honorary Physicians, and Clinical Professor of Medicine Emeritus, HMS, has been awarded the Alfred Stengel Memorial Medal of the American College of Physicians. This award is given "to a Master or a Fellow of the College for outstanding service to the College in an official capacity."

Dr. Jones, a graduate of Williams College and HMS, began his MGH career in 1917 as a medical intern. Soon he was studying blood pigment metabolism and biliary physiology under Dr. George R. Minot. When Dr. Minot transferred to the Huntington Memorial Hospital, Dr. Jones remained here and began to develop his own line of liver and gastrointestinal research.

In 1923 he established the Gastroenterological Clinic with the assistance of a young surgeon, Dr. Monroe McIver. As the clinic grew, psychiatrists and social workers joined its staff — long before the term "psychosomatic medicine" was popularized.

Dr. Jones's book on the anatomical localization of referred pain from the

Continued on Page 3

50th Anniversary of Base Hospital No. 6 Observed at MGH

The 50th anniversary of the mobilization of U. S. Base Hospital No. 6, AEF, the MGH unit in World War I, was observed on Saturday, May 27, 1967 at the Hospital. About 50 veterans, including members of the Talence Club and the Bordeaux Belles, held a reunion in the Moseley Auditorium, followed by a dinner in the room overlooking the Macomber Patio.

Among the speakers at the dinner were Mr. Albert E. Hunter, president of the Talence Club for many years; Mr. Howard E. Pooler; Miss Margaret G. Reilly, RN, of the Bordeaux Belles; Bishop Henry K. Sherrill, Chaplain; Dr. Hugh Stalker; and Dr. Paul D. White. The Talence Club includes the enlisted men of the unit, and the Bordeaux Belles the nurses and secretaries — most of whom were MGH personnel prior to American entry in World War I.

The outstanding record of Base Hospital No. 6 was the product of a magnificent team effort, but if the name of only one man were to be singled out for recognition it would certainly be that of Col. Frederic A. Washburn, Director of the MGH, who assumed command of the unit on May 29, 1917. The origin of No. 6, however, may be traced back to a letter written by Dr. Washburn to Surgeon General W. C. Gorgas in Washington, D.C., requesting an appointment for discussing a plan for staffing future army hospitals with the personnel of large civilian hospitals. At the ensuing meeting these two men were joined by Dr. Winford Smith, Director of the Johns Hopkins Hospital, and Col. Jefferson Kean, MC, who had already advocated medical schools as bases for the formation of new military hospitals. The final decision was to activate military hospitals in both civilian hospitals and medical schools under the auspices of the American Red Cross.

The MGH Board of Trustees voted on March 17, 1916 to organize such a unit with Dr. Washburn as its head. Dr. Richard Cabot was selected as Chief of

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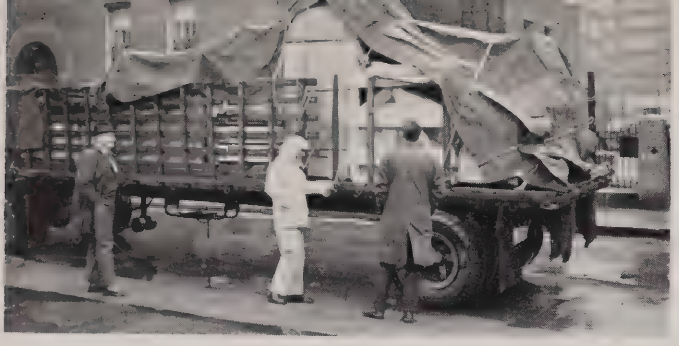

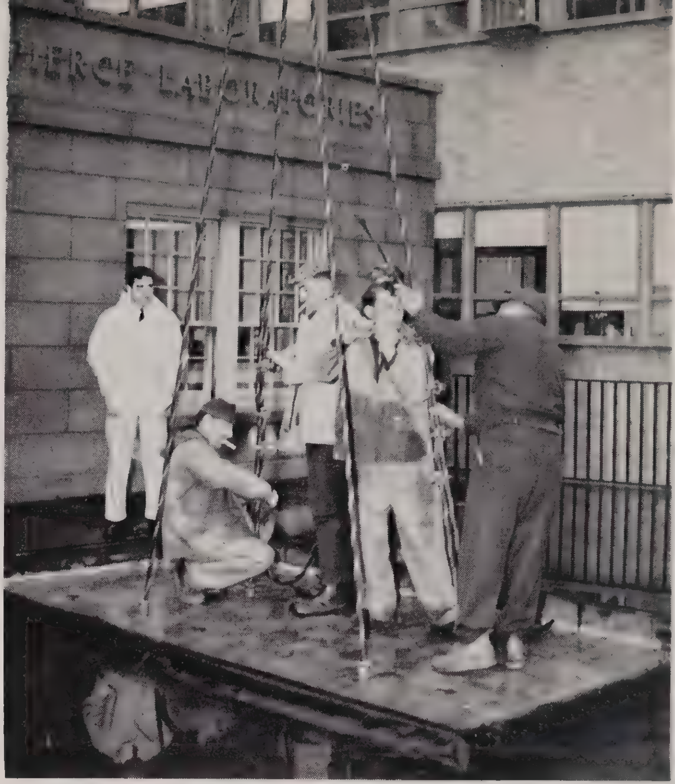

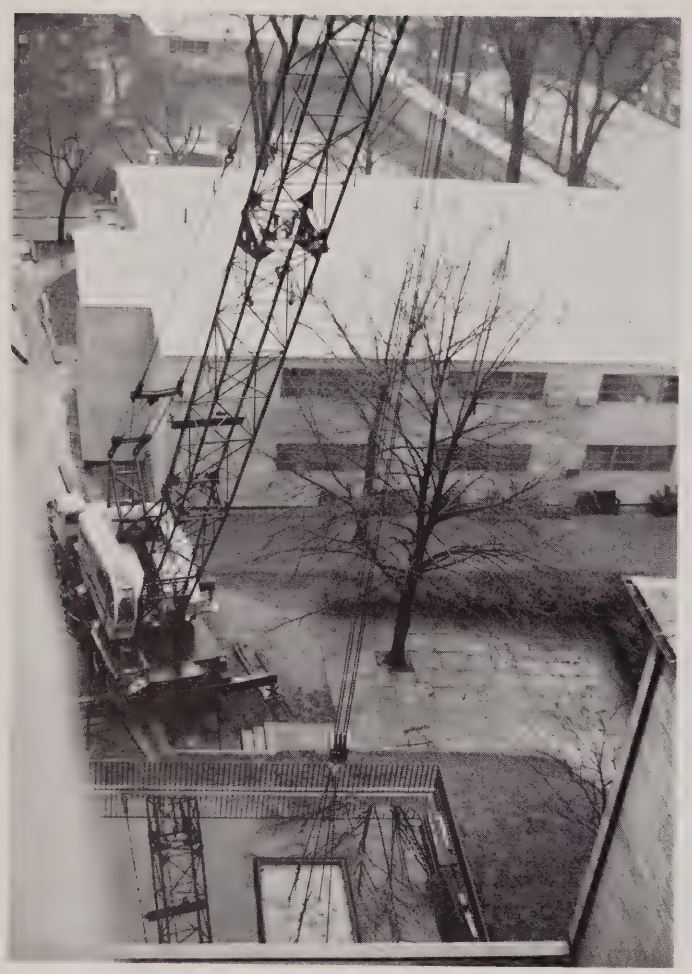

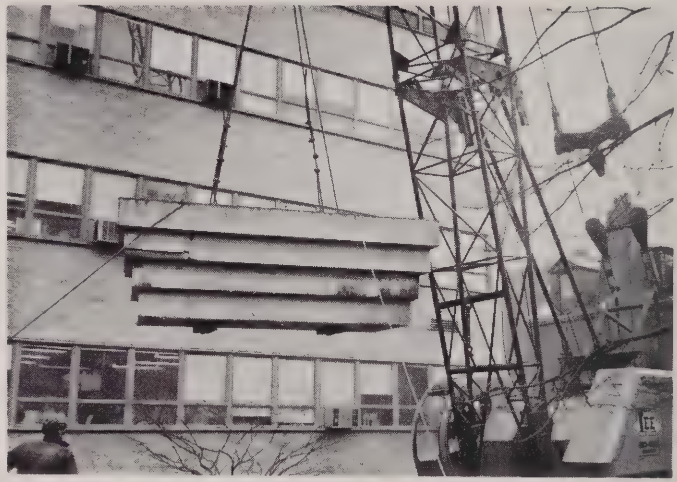

Cyclotron Installed

The pictures on this page, taken by the MGH Medical Photography Unit on April 18, show preparations for the installation of the Allis-Chalmers cyclotron in the Pulmonary Unit of the Harold W. Pierce Cardiopulmonary Research Laboratories.

The upper left picture shows one of several truckloads of cyclotron components outside the Parkman Street Gate. The upper right picture shows a crew connecting the lifting cables of a crane to the 30-ton hatch access cover, just above the sub-basement room designed to house the cyclotron. The man on the left, wearing light-colored rain gear, is Mr. Paul H. Burr, who will supervise the development and operation of the Cyclotron Laboratory.

The center left picture shows the crane just as it was set to break loose the hatch cover, which was also being

Continued on Page 3

Cyclotron . . .

Continued from Page 2

jacked loose from below. A portion of the Bulfinch Building is visible in the lower right corner, and the blurred object in the low left corner is the parapet of the Research Building, from which the picture was taken. In the background are three of the temporary buildings that house various displaced units which will eventually move into the new Surgical and Special Services Building.

The center right picture shows the hatch cover being lifted by the crane. In the lower left view the camera was aimed downward through the open hatch. In the lower right picture the first of several crates of cyclotron components is being lowered down the hatch.

Before the cyclotron is ready to function, numerous structural readjustments and refinements are necessary. Its operation will be the responsibility of the Physics Research Laboratory, under the direction of Dr. Gordon Brownell. Mr. Burr, who joined his staff in 1965, is well qualified to supervise the work of the Cyclotron Laboratory, having had seven years of experience with the Cambridge Electron Accelerator at Harvard University, where he undertook various tasks relating to the development and operation of that machine and the experiments conducted therein.

The principal task of the MGH Cyclotron Laboratory will be to provide short-lived isotopes (oxygen 15, nitrogen 13, carbon 11) for clinical investigators in pulmonary and related physiology, under the direction of Dr. Homayoun Kazemi, Chief of the Pulmonary Unit. As this work progresses, it is expected that short-lived isotopes will find application in cerebral, renal, and other blood flow studies.

Dr. Lewis L. Engel, Biochemist in the Huntington Memorial Laboratories at MGH, and American Cancer Society Professor of Biological Chemistry at Harvard, has been granted a leave of absence to serve for one year as Macfarlane Professor of Experimental Medicine at the University of Glasgow, Scotland, beginning next October 1. He will be based primarily in the Department of Pathology at the Glasgow Royal Infirmary, continuing his investigation of problems relating to cancer.

Dr. Victor W. Sidel, Chief of the Community Medicine Unit, MGH, will be on study leave from July through September 1967 at the Soviet Ministry of Health in Moscow (under the U.S. - U.S.S.R. Health Exchange Program) and from October 1967 through June 1968 at the Social Research Unit in the University of London.

Respiratory Unit Passes Fifth Year

The Respiratory Unit of the Department of Anesthesia, presently located on Phillips House 2, recently celebrated its fifth anniversary. During its first five years, 535 patients were admitted with severe respiratory failure requiring artificial ventilation. This represents approximately 30% of the total number of patients similarly treated at MGH during this period. The average duration of patient stay was 15 days.

One of the aims of the Respiratory Unit is to apply an interdisciplinary approach to the care of critically ill patients with respiratory failure, because it has become quite clear that such patients cross the boundaries between the medical and the surgical specialties. The fulfillment of this aim will be greatly facilitated when this unit acquires more beds in the Surgical and Special Services Building in 1968, together with a new laboratory adequately equipped for clinical studies of respiratory-circulatory functions.

During the same five-year period, 128 doctors and 85 staff nurses received special training in the Respiratory Unit; in addition, a continuous teaching program for fellows and medical students has been in operation under the direction of Dr. Henning Pontoppidan, Chief of this unit.

Dr. Pontoppidan is now working on the second edition of a book that has won wide recognition, *Respiratory Care* (St. Louis, Mosby, 1965). The authors of that book, in addition to Dr. Pontoppidan, included Drs. H. H. Bendixen, L. D. Egbert, J. Hedley-Whyte, and M. B. Laver.

Dr. Henry K. Beecher, Chief of the Anesthesia Service, MGH, and Dorr Professor of Research in Anaesthesia, HMS, lectured recently on the measurement of pain in man and animal at the University of Paris and on disease and pain at the University of Milan.

Dr. Otto E. Aufranc, Visiting Orthopedic Surgeon at MGH, received a Citation of Merit from the alumni association of the University of Missouri last April 8.

Mrs. Edith Tagrin, Director of the Medical Art Unit, received a second award in the medical category at the fourth annual technical art exhibit of the Technical Art Group, Boston Chapter of the Society of Technical Writers and Publishers, held last April 13. Her entry was entitled "Surgery of the Frontal Sinus."

Dr. Chester Jones . . .

Continued from Page 1

gastrointestinal tract became a standard work on this subject. In 1954 Dr. Jones and Dr. Walter Bauer took charge of the postgraduate courses conducted under the auspices of the Department of Medicine of Harvard at MGH. Although his statutory retirement occurred in 1957, Dr. Jones occupies much of his time at Harvard as advisor on internships.

Dr. Jones became a member of the Board of Internal Medicine in 1948 and was its chairman from 1955 to 1957. He has served as President of the American Gastroenterological Society, the American Clinical and Climatological Society, and the American College of Physicians. He received the honorary degree of Doctor of Science from Williams College in 1942 and was made an Honorary Fellow of the Royal College of Physicians of Canada in 1963.

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Dr. John D. McLean was appointed Chief of the MGH Podiatry Service by the Board of Trustees on April 14, after having served as Acting Chief for the past three years. About 3,500 patients, most of them having diabetic or vascular deficiencies, are treated annually in this unit.

Dr. McLean is a past president of the Massachusetts Academy of Podiatrists and also of the Massachusetts Podiatrists Society.

Correction: In the previous issue it was stated erroneously that the MGH Communications Center requires a staff of eleven. Actually, it employs 20 full-time telephone operators, 5 part-time operators, 2 operators on call, and an assistant (Mrs. Glionna) to the Communications Coordinator, Miss Evelyn Dunn. In addition, New England Telephone assigns 2 full-time installers and one full-time repairman to the Hospital.

Honored by Purdue

Dr. Melvin J. Glimcher, Chief of the Orthopedic Service, MGH, and the Edith M. Ashley Professor of Orthopedic Surgery at Harvard Medical School, was awarded the title of "Distinguished Engineering Alumnus" by Purdue University on May 6. This title has been conferred annually since 1964 on ten graduates of Purdue's engineering schools "in recognition of outstanding achievement in professional and related fields of activity."

Dr. Glimcher earned two B.S. degrees *summa cum laude* in mechanical engineering and in physics at Purdue in 1946, and graduated *magna cum laude* from the Harvard Medical School in 1950. He began an MGH surgical residency in July 1951, and was appointed to the Active Staff in 1956.

In 1959 he received the Kappa Delta Award of the American Academy of Orthopedic Surgeons in recognition of research he performed in the laboratories of Professor Francis Schmitt as a Fellow of the School of Advanced Studies at MIT.

Dr. Glimcher was appointed Director of the Orthopedic Research Laboratories at MGH in 1960 and Chief of the Orthopedic Service in 1965, succeeding the late Dr. Joseph S. Barr. Dr. Glimcher has made significant contributions to the study of bone and tooth enamel structure on the molecular level.

Purdue News Bureau

Dr. Glimcher (left) receives certificate from Frederick L. Hovde, President of Purdue University.

Tilton Building . . .

Continued from Page 1

pitals, whether general or psychiatric, emergency psychiatric consultation is provided only on an "on-call" basis.

In the Acute Psychiatric Service residents, psychiatric social workers, case aides, senior staff men, and secretaries are in attendance to meet the wide range of patients in crises who may have entered the emergency service of the MGH asking directly or indirectly for help with emotional problems alone or with the emotional complications of physical problems. The thrust of the Acute Psychiatric Service is to provide around-the-clock coverage for a wide variety of people so that their immediate needs are met; the acute problem is used as a means of reaching out for the underlying psychopathology, thereby motivating patients into a treatment setting.

Evaluation in the Acute Psychiatric Service includes not only the patient but his family and those who may accompany him. Along with this total evaluation, an ongoing liaison with intra-hospital and extra-hospital resources is maintained so that the most appropriate referral can be made. Furthermore, the Acute Psychiatric Service fulfills the responsibility to follow through, whereby communication with the agency to which the patient has been referred is maintained (1) to have a feedback as to the appropriateness of the referral and (2) to reassure the agency of our continuing interest as the need for our service arises. This minimizes the "dumping syndrome", which mitigates against a healthy attitude toward the patient involved.

The around-the-clock psychiatric service evolved from research on motivating alcoholic patients to voluntarily seek out and come for treatment. The Alcohol Clinic has been a leading center in developing new procedures of early case finding, treatment and examination of caretakers' attitudes toward alcoholic patients. More recently, its research has shown that people with alcoholic problems must wait until the late stages of their conditions before they are appropriately diagnosed and treatment is instituted.

For these and other reasons, the entire orientation of the Alcohol Clinic has been redirected toward avenues of early identification and prevention. The Clinic has also developed studies which proved that alcoholic patients were highly motivated for treatment but caregivers were not highly motivated to treat them, and studies have also shown that the medical profession uses standards of evaluating treatment results in alcoholic patients that are different from standards used in other chronic conditions of medicine — which assures the conclusion that alcoholics do not respond successfully to treatment.

The fact that a major teaching hospital affiliated with Harvard Medical School has seen fit to expend funds to construct a facility which treats the neglected alcoholic population and offers around-the-clock psychiatric help to a vast population of lower socioeconomic people who were for many reasons denied psychiatric aid, marks a significant turning point in the recognition of responsibilities in these two areas of the medical profession.

Morris E. Chafetz, MD
Director, Alcohol Clinic
And Acute Psychiatric Service

Retina Foundation

The Retina Foundation Institute of Biological and Medical Sciences, a close neighbor of the MGH, conducted a scientific program and open house on the occasion of the opening of its new laboratories last May 23. This expansion of facilities enables the Institute to consolidate the projects of seven research departments into two major programs: research on human development and aging, and research on the retina and cornea.

The chairman of the morning program was **Dr. Carl F. Cori,** Visiting Biochemist in Medicine at MGH, a former member of the MGH Scientific Advisory Committee, and a Nobel Laureate. Last March Dr. Cori had received an honorary degree from the University of Granada in Spain.

Dr. Norman H. Bass, Research Fellow in Neuropathology at McLean Hospital and HMS, received the S. Weir Mitchell Award of the American Academy of Neurology recently in San Francisco.

Dr. Robert S. Schwab speaks at the dinner given in his honor last March 18 by the American Parkinson Disease Association at the Sheraton Boston Hotel. From left: Thayer Baldwin, Dr. Elwood Henneman, Dr. Raymond D. Adams, Dr. Herbert Jasper, and Dr. Schwab.

Green Light Aport

The following anecdote was narrated by Dr. Robert Schwab at the dinner given by the American Parkinson Disease Association in recognition of his contributions to electroencephalography as Director of the MGH Brain Wave Laboratory since 1937.

In the Summer of 1930, as a 4th year Harvard Medical School student, I was assigned to the MGH Surgical Service. I decided to live on my sailboat, *Romp,* and sailed it down from Salem the first Sunday in July, anchoring it right in front of the Phillips House of the MGH, approximately 100 feet from the door. (The Charles River Basin is very much farther away now from the Hospital.)

On Monday I reported to the Chief Resident on the surgical ward with five other students. We were told to rotate for night admission histories and leave our phone numbers with the chief nurse. I said that I had no number, since I was living on a boat, and was told that no exceptions could be made: get the nearest phone number that will do, and do not argue.

Two hours later all of us were in the Phillips House operating room to see the late and famous Dr. E. P. Richardson do a gall bladder. At the nurses' desk there was a window, and through it, eight floors down, and out 100 feet or so, was *Romp,* saucy in a southwest breeze. I asked the nurse in charge, "Is someone here all night?" Of course, by the phone, and *the idea clicked.*

I explained my problem. I would bring both my 12-hour red and green kerosene side lights and would leave the lighted green one on the window sill, the lighted red one on the floor. I would give the surgical ward nurse the Phillips House operating room number. From the cabin on *Romp,* about every hour, I would see the green light on the 8th floor, meaning no calls, so back to sleep. In one-half hour I would peek. If I saw the red light from the bunk, would row ashore and so to the Ward for the night admission history. The operating room nurse said the plan was OK if I would get the lights out by 8 A.M.

It worked fine for the first week, and then on the ward came an order to report at once to Dr. Washburn, Director, and an ex-Army Colonel, strict, who tolerated no foolishness. I reported, and he said, "Young man, I have heard that you were hanging a red light on the Phillips House. This is not allowed. There can be no arguments. Good day!" So my wonderful plan collapsed and I worked out other plans to do my stint.

But time marches on. Dr. Washburn retired. World War II came and went, and in 1948 Colonel Washburn developed myasthenia gravis, a specialty of mine. Dr. Henry Viets and I were asked to see him on the 7th floor of the Phillips House, overlooking the Basin. When he was doing well, and about to go home, I reminded him of the summer of 1930, and told him how he had spoiled my paging system, hoping that he would say he was sorry.

He spoke thus (a lively twinkle in his eye, even at 79): "I remember the incident well, young man, but I had it told me quite wrong. I heard you wanted the red light so you could find the Phillips House with your boat. I know the Basin well, and I thought any medical student so dumb as to require a light on the Phillips House to find it should not get my help to become a doctor, so I forbade it!"

Robert S. Schwab, MD
Director Brain Wave Laboratory

MGH Doctor Heads Crime Commission

Dr. Edward B. Benedict, formerly chief endoscopist at MGH and now President of the New England Citizens Crime Commission, presided at the annual dinner of the Commission on May 15 at the Sheraton Plaza Ballroom in Boston, with more than 500 people in attendance. Two of the speakers were Attorney General Elliot Richardson and Professor James Vorenberg, executive director of President Johnson's Commission on Law Enforcement.

Dr. Benedict states: "Our work continues to be of very great importance, and although our income increased from approximately $41,000 in 1965 to $62,000 in 1966, we still need money. You can't fight crime without money!

"Among other things we are carrying on activities in investigation, in the formation of new chapters, in coordinating Greater Boston agencies, and in juvenile delinquency. The only way we're going to defeat organized crime is to have an even more organized effort to combat it. *America can control crime if it will.*"

Dr. Benedict also stresses the importance of *citizen* support in this endeavor. Among those who serve on committees of the New England Citizens Crime Commission are several well known at MGH: Dr. Wyland Leadbetter, Dr. George C. Shattuck, Dr. Paul D. White, and Mrs. H. Dunster Howe.

Fay Foto Service

Edward B. Benedict, MD

Dr. Lot B. Page, who became Chief of the MGH Hypertension Clinic in 1959, is the latest member of the Medical Service to be called to a major appointment elsewhere. He is now Chief of the Medical Service at the Newton-Wellesley Hospital.

Dr. George B. Baker, Jr., is now Acting Chief of this clinic, and is assisted by Dr. Jan Koch-Weser.

A Tribute to Ruth Sleeper, RN

Every composition should have a title, and so I am calling this "The Truth about Ruth."

It has been my good fortune to have known Ruth Sleeper for 32 years, and as Director of the MGH to have benefited from her administrative and educational ability. In addition, I have enjoyed the pleasure of her genial company and her radiant comeliness. Truly I have been a lucky man.

Miss Sleeper graduated from the MGH School of Nursing in 1922 and later received a B.S. and M.A. from Teachers College, Columbia University. Thereafter she "wandered in the wilderness" — that is, away from Boston — until she returned to the MGH in 1933 as Assistant Superintendent of Nurses and Assistant Principal of the School of Nursing. She is therefore the product of a hospital school of nursing, often designated as a diploma school, with a frosting of academic degrees.

Sometime during the 1930s the National League of Nursing Education and the American Nurses Association began their efforts to improve the standards of nursing schools and nursing education. They believed, and properly so, that the need for competent instructors and administrators in schools could best be met by requiring them to have academic degrees. They successfully encouraged many colleges and universities to establish schools of nursing granting B.S. degrees. They developed an accreditation program which resulted in the improvement of progressive hospital schools and the elimination of those falling below standards. Both of these accomplishments were good. But there remained the problem of how to produce the number of nurses needed. Academic schools could produce only a fraction of that number, and it was evident that hospital schools must be continued. What was to be the standard and standing of hospital schools and their graduates, and how was the interest of students to be retained?

This was the problem which faced the MGH School of Nursing in 1941, and so Miss Sleeper as Assistant Principal was assigned to make nursing education her major responsibility.

The MGH is proud of its School of Nursing and its 5500 graduates. They have gone all over the world; some have become deans of academic schools; some have become principals or teachers in other schools; some, directors of nursing service in other hospitals; they have always been the mainstay of patient nursing at MGH. Many of its graduates went to Teachers College, as Miss Sleeper did, or to other colleges and obtained degrees which enhanced their ability and standing. Since 1936 the School has been guided by an Advisory Committee and supported by a sympathetic Board of Trustees. The Hospital has borne the increasing cost of operation without outside help, reccognizing that somebody must supply nurses qualified educationally and practically to fulfill the nursing needs of modern hospitals. It is a splendid record.

In spite of this solid foundation the situation which confronted Miss Sleeper in 1941 was far from rosy. How to attract qualified students; how to obtain competent teachers; how to convince trustees to spend money for the School; how to provide adequate housing for students and teachers; how to find class rooms . . . how, how, how?

Miss Sleeper went to work to build a better School. But before any steps could be taken, World War II was upon us and the U. S. Cadet Nursing Corps demanded attention. She met this challenge successfully. From experience gained from the accelerated program of the Cadet Corps, Miss Sleeper created a Revised Program for MGH, with 28 months of instruction and 9 months of practice — a sort of internship. During the first period emphasis was on instruction, classes and laboratory work, with enough service to patients to give practical application to what had been taught. During the last 8 months emphasis was on application with a minimum of instruction, and students were paid a small salary. They were of real service to the Hospital, and this helped their morale and kept them from feeling that they were being exploited. It was a bold experiment, but it worked.

Ruth Sleeper, RN

For many years the School had had an affiliation with Simmons College whereby after five and a half years a student would receive a B.S. from Simmons and a diploma of nursing from MGH. Then Simmons set up its own school of nursing. I well remember the frustrated efforts of Miss Sleeper, Miss Sally Johnson and myself to replace this affiliation. Boston University — at first yes, then no; they would set up their own school. Harvard University and Medical School — no, but at last in 1945 Harvard agreed to a B.S. from Radcliffe and a diploma from MGH. Again MGH graduates could start with an academic degree if they wished. Now this arrangement has been given up. This seems incomprehensible.

The twofold objective of the MGH School of Nursing has been to graduate young women who would be proficient in the increasingly exacting care of patients, and who would have an educational foundation which would equip them to become teachers, administrators and leaders in nursing. Those who directed the School recognized that it could not match the educational facilities of a college, but they felt they could approximate this and provide their graduates with a solid foundation for further advancement. They also felt that MGH graduates could excel in the practice of nursing techniques and patient care and that B.S. graduates often needed to add several months of experience in order to do as well, thereby adding to the cost and length of their education. In other words, they felt the School was producing good nurses equipped with an educational foundation for continuing advancement at reasonable cost in money and time to the student.

Under Miss Sleeper's guidance the MGH strove to improve its educational facilities with more teachers, more supervisors, concentrated study with shorter hours of service, balancing education and vocational practice. This meant planning a new curriculum, planning service assignments to fit with classes, recruiting more students, solving housing problems, obtaining better classrooms and labs, and justifying the increasing costs of the School to Trustees. She believed that there was need for such a school, and so Ruth Sleeper labored and triumphed. Viva la Sleeper!

Housing for nurses was finally provided by the erection of Bartlett Hall, the acquisition of the Lincolnshire Hotel, and the renting of apartments in the West End Development (now Charles River Park). These, together with Walcott House, take care of students and graduate nurses and teachers in comfortable quarters. The problem of classrooms was solved by the purchase from the City of Boston of the abandoned Winchell School. The added teachers and supervisors required for the Revised Program meant added cost, and the Trustees at first only reluctantly agreed, but when they saw the increased number of students and the number of graduates returning to the Hospital, they accepted it with enthusiasm. Much has been accomplished, but constant work remains; there is competition with collegiate schools for teachers and students, but this is what one hospital and one woman have done.

We the people of the United States believe in education. We provide public schools with free instruction and state universities with token tuition charges, so that all will have a chance to be educated. But paradoxically, although we know that we must have nurses in order to operate our hospitals and care for our sick, and except for a few nursing schools in city hospitals and state colleges and a few federal scholarships, we spend not a cent of tax money to educate them. That is left to the sick patient, to charitable funds, and to the students themselves. How stupid can we be?

We need 70,000 new nurses every year, but only 35,000 are graduated. Academic schools graduate 7500 and the remaining 27,500 come from hospital schools, and it is obvious that this must continue for some time. For a hundred years nursing education has been the Cinderella of our Educational System. It is time for the community, the federal and state governments to wake up and include the education of nurses in the Educational System. Somehow the hospital school must be given a standing somewhat like that of a Junior College or Community College with the same financial help that is accorded them.

There are encouraging signs that this is being recognized. In New Jersey a bill has been introduced in the legislature to provide financial aid to hospital diploma schools in the same amount as community colleges now receive. In Minnesota a bill would provide financial support to voluntary nonprofit institutions providing education for nurses. It recommends granting aid to the extent of $200 per student in each diploma school and to each college offering associate degrees in nursing.

Prospective doctors and nurses can be taught in school classes the basic knowledge and theory of medicine and nursing, but the practical application of medicine and nursing must be gained by practice on patients under supervision. Academic schools believe they should control the teaching of theory and practice. To do the latter without disrupting the care of patients, practice must be directed by the hospital staff nurses. Both points can be accomplished by having the hospitals select competent supervisors to direct the practice and having the colleges appoint them as faculty members, following the example of teaching hospitals and medical schools, where the medical students are given clinical instruction by members of the hospital staff who are also faculty members of the medical school. Such an affiliation between colleges and hospitals can be made if the spirit is willing. In detailing the above I think I have correctly represented Miss Sleeper's idea of nursing education, with which I wholly agree.

Miss Sleeper's ability and her success with the MGH School were quickly recognized. Consequently, she was asked to serve on innumerable committees of the National League of Nursing Education, the American Nurses Association, the International Council of Nurses, the U. S. Public Health Service, the World Health Organization, the American Hospital Association, and many others. There were countless trips to Washington, Chicago and other cities, and for six years trips to Europe for the International Council of Nurses. Her ability and wisdom were rewarded by the granting of several honorable degrees, and she became that "rara avis," a prophet honored in her own country.

Through it all she lived quietly in Walcott House until in 1966 she retired, officially at least, to her home in Braintree. Although her hair grows white, her eyes sparkle as brilliantly as ever, her vivacity and get-up-and-git never lessen, and her smile is as warm as ever. She seems to have drunk of the Fountain of Youth. And may she enjoy this draught to the end.

How fortunate we all are to have known Ruth Sleeper.

NATHANIEL W. FAXON, MD
Director, Emeritus, MGH

Presented at the "Tribute to Ruth Sleeper" held on May 9, 1967 during the biennial meeting of the National League for Nursing in the New York Hilton Hotel.

Treadwell Library

Computerized bibliographic service is now available to all medical and paramedical workers in New England by contacting the Countway Library of Medicine at the Harvard Medical School. MGH staff members may obtain this service by dialing 124-109, which will connect them with Mrs. Marsha Ford and her staff.

In May 1966 the Countway Library became one of five regional centers of MEDLARS (Medical Literature Analysis and Retrieval System), the central unit of which is in the National Library of Medicine at Bethesda. Magnetic tapes on which are recorded the periodical citations published in the monthly *Index Medicus* are fed to a high-speed digital computer at the Harvard University Computing Center at 33 Oxford Street in Cambridge.

Requests for bibliographies are first reformulated by Countway personnel in language acceptable to the computer, and are then punched on cards which are fed into the computer. The resultant product is typed by computer-linked equipment and mailed to the requester. At present the waiting time before receipt of a requested bibliography is from three to five weeks, but Librarian Ralph Esterquest expects this time to be reduced as his staff acquires experience.

A full bibliography on a given subject will include all periodical articles on that subject that have been cited in *Index Medicus* since January 1964. The trick is to whittle down one's designation of his subject to the narrowest degree of specificity possible, in order to exclude irrelevant matter. It is a good practice frequently to consult *Index Medicus* and especially the annual *Medical Subject Headings,* the latest of which appears as Part 2 of the January 1967 *Index Medicus.*

Such practice will enable one to note how the experts in the National Library of Medicine analyze and categorize the innumerable items that swell the overwhelming flood of contemporary biomedical literature, so that any item can be retrieved immediately.

David A. Lang

Simon Elden has been selling flowers at MGH for 23 years.

Larry Cook

Veterans of Base Hospital No. 6 at MGH on May 27, 1967

Base Hospital No. 6 . . .

Continued from Page 1

the Medical Service of the unit, Dr. Lincoln Davis as Chief of the Surgical Service, Miss Sara Parsons as Chief Nurse, and the Rev. Henry K. Sherrill as Chaplain.

Following American entry into World War I, Dr. Paul White was ordered to active duty on May 24, 1917 to recruit enlisted men from a group of 600 MGH employees who had volunteered for military service. On June 1 the medical detachment of what was now designated as Base Hospital No. 6 proceeded to Fort Strong in Boston Harbor for military training.

On Sunday, June 3, a farewell service was conducted at Trinity Church in Copley Square, and Chaplain Sherrill, clad in his Red Cross uniform, assisted Bishop Lawrence.

On June 29, 64 nurses, 6 secretaries, and one dietitian proceeded to Ellis Island, New York, and nearly two weeks later 28 medical officers and 153 enlisted men arrived there from MGH.

No. 6 began its voyage across the submarine-infested Atlantic aboard the Cunard liner *Aurania* on July 11. It arrived at Queenstown Harbor on July 21 and debarked at Liverpool two days later. Eventually it reached its final destination, a French hospital at Talence, a suburb of Bordeaux. The first military patient on the Medical Service was admitted on August 21. No. 6 began as a 200 bed installation, but new buildings were constructed and on November 12, 1918 the patient population was tallied at 4,319. During its active career, No. 6 admitted nearly 25,000 patients and performed 3,442 surgical operations.

World War I was very bloody, and the staff of No. 6 was called upon to make a herculean and sustained effort. Numerous hospital train convoys brought casualties from the Western front, including victims of gas attacks, and in September 1918 the worldwide influenza epidemic hit France just as the massive Argonne offensive was beginning to roll. In this situation the laboratory of No. 6 under the direction of Capt. (later Maj.) Roger Kinnicutt, by improvising new techniques in military epidemiology, made it possible for No. 6 to achieve the lowest mortality rate in any of the base sections of the AEF.

The spirit of MGH progressiveness flamed high when Maj. Richard Cabot organized a summer course in July 1918 for a large group of casual medical officers temporarily attached to the unit. He also sparked the observances of Ether Day at Talence, and greatly assisted Chaplain Sherrill in maintaining the high morale of No. 6.

In April 1918 Col. Washburn was ordered to proceed to England to take charge of the hospitalization of all American casualties in that area. Maj. Warren Babcock then became the commanding officer of No. 6.

The MGH unit was relieved of duty on January 14, 1919, when Base Hospital No. 208 moved into Talence. The majority of the officers and the nurses returned to America on the transport *Abangarez* in February, and the remaining officers and the enlisted men on the *Antigone* in March. No. 6 was demobilized at Camp Devens, Mass., on April 9, and a Welcome Home Service was held in Trinity Church shortly afterward. A reception for No. 6 was held at the Hospital on June 9.

On June 27, 1922 the Surgeon General authorized the formation of General Hospital No. 6, Organized Reserves of the U. S. Army, at MGH under the command of Lt. Col. J. Howard Means. After America was drawn into World War II, the Sixth General Hospital was activated on May 15, 1942 under the command of Col. Thomas R. Goethals.

Two Harvard Reunions

Two Harvard wartime units recently held 25th and 50th anniversary reunions, respectively.

Base Hospital No. 5 celebrated its Golden Jubilee last May 20 at the Sheraton Commander Hotel in Cambridge. This unit, recruited largely through the effort of Dr. Harvey Cushing at the Harvard Medical School and the Peter B. Brigham Hospital, sailed from New York on the Cunard liner *Saxonia* on May 11, 1917 with 50 doctors, 80 nurses and 197 enlisted men. It arrived at Falmouth, England, on May 21. It was stationed first at a British general hospital in Camiers, France, and later in Boulogne. Among its officers were Drs. Roger Lee, Robert Osgood, and George Derby.

The Harvard Unit of the **105th General Hospital,** which served in the Pacific during World War II, met at Steele Hill, N.H., on April 22-23. Among its officers were Drs. Edwin Cave, Albert Coons, George Marks, Arthur Pier, Carter Rowe, and Augustus Thorndike.

Mission to Vietnam

DR. JOHN D. CONSTABLE, a member of the MGH Surgical Service and the staff of the Shriners Burns Institute, visited South Vietnam recently as a member of a 3-man investigating team appointed by the Committee of Responsibility, a national organization of about 200 citizens based in New York and dedicated to the task of finding ways to treat civilian war casualties, especially children, in the 47 provincial hospitals of that country.

The 3-week tour of the team was sponsored jointly by the U.S. Agency for International Development (AID) and the Vietnamese Ministry of Justice. Initial funds to build hospitals will be provided by AID, and operational funds and personnel will be supplied by the U.S. Defense Department. This program was initiated by a directive signed by President Johnson, following the recommendations of Dr. Howard Rusk.

Dr. Edward D. Churchill, former Chief of the Surgical Services, MGH, and Homans Professor of Surgery, Emeritus, HMS, was guest speaker at the Dogwood Festival Dinner of the Knoxville (Tenn.) Surgical Society last April 21. He spoke on his reminiscences of World War II. It will be recalled that one of his greatest contributions as a consultant to the Surgeon General of the Army was the revision of surgical management in the combat area with evacuation of the wounded based on the surgical urgency of their wounds. He is now bringing to completion a book on his wartime reminiscences.

The NEWS of MGH

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Medical Photography Lab.

J. Howard Means, MD

(1885-1967)

Dr. J. Howard Means was a great service chief in the truly MGH tradition, a stimulating teacher, and a social catalyst who stirred the conscience of American medicine. His joint appointment as Chief of the MGH Medical Service and Jackson Professor of Clinical Medicine (Harvard) in 1923 presented him with a challenge of the highest magnitude, and he met it head on.

In 1923 the capital of American medicine was still Baltimore, where a German-trained faculty had created a type of university-operated and research-oriented hospital that was new to this country. At the Johns Hopkins Hospital each major teaching service was headed by a professor-chief with continuous tenure, whereas the MGH had long been burdened with an unwieldy system of rotating Visiting Physicians and Visiting Surgeons, each of whom served but four months of the year, and none of whom functioned as continuous service chiefs. Under this system none could pursue or supervise effectively the type of ongoing clinical investigation required in the dawning age of scientific medicine.

Beginning in 1908, a tortuous process of staff reorganization at the MGH had by 1921 resulted in the consolidation of the medical teaching services under Dr. David L. Edsall as full-time Chief and Jackson Professor. He had been called here from St. Louis in 1912 because of his outstanding record as a clinical investigator. In 1923, however, he resigned to become full-time Dean of the Harvard Medical School. A joint committee was then formed to find his successor, and it was considered essential that this successor be well versed in clinical investigation. If the time-honored system of seniority promotion had been adhered to in 1923, young Howard Means would not have been selected. Why, then, did the committee choose Dr. Means?

Howard Means was born in 1885 in Dorchester, Mass. Many of his ancestors had been ministers, but his father James was a pioneer of aeronautical science. Howard prepared at Noble and Greenough's School, and in 1902, at the age of 17, became a special student of biology and chemistry under Prof. William Sedgwick at MIT, then located near Copley Square. Thus his interest in science had been awakened early; but his feeling for the humanities, seasoned with a streak of New England conscience, drew him to Harvard College and the Harvard Medical School, where he graduated in 1911 as top man in his class.

Dr. Means began an MGH internship on the East Medical Service on Dec. 1, 1911, shortly before the arrival of its first full-time chief, Dr. Edsall. The residency system, patterned after that of the Hopkins, was being introduced at MGH, and the first medical residency (1913) was given to Dr. Walter Palmer, who was working on biochemical problems under the guidance of Prof. Lawrence Henderson of Harvard. So Dr. Edsall gave Dr. Means the Henry P. Walcott Fellowship and the opportunity to study calorimetry under Dr. F. G. Benedict at the Carnegie Nutrition Laboratory in Boston; blood flow under Prof. August Krogh in Copenhagen; and gaseous metabolism under Prof. Bancroft in Cambridge, England, and under Prof. Graham Lusk and Dr. E. F. DuBois in the pioneering Metabolic Ward of the Bellevue Hospital in New York. These experiences reinforced Dr. Means's early decision not to go into private practice — an unusual decision at that time.

Back at MGH, he began to conduct clinical investigation with a Benedict respiration calorimeter in a small chamber under the OPD amphitheater. This was the beginning of the Basal Metabolism Laboratory. In 1916 he was appointed Asst. Physician to Outpatients. During World War I he was adjutant to Col. Frederic Washburn at Base Hospital No. 6, the MGH unit in France. (In 1923 he was commissioned commanding officer of that unit's stand-by successor, General Hospital No. 6.)

Again back at MGH, his next goal was the establishment of the Thyroid Clinic (1920). Earlier he had noted that the computation of basal metabolic rate provides a quantitative approximation of thyroid secretory activity, and so he oriented his research toward study of the thyroid hormone. One of his great accomplishments was the definition of the iodine reaction in Graves's disease. It was characteristic of Dr. Means that he should invite the active participation of fellow investigators, pathologists, radiologists, surgeons, and eventually psychiatrists in the sessions of his weekly clinic.

Thus the reason for his appointment as Dr. Edsall's successor at the MGH is apparent. As Chief, he made good use of Edsall's technique in building up his

John J. Fields

staff: he selected the most promising young scholars, obtained for them fellowships and scholarships that enabled them to study under leading experts, and then gave them full rein to pursue lines of clinical investigation in their own way.

His protégés and colleagues — Albright, Aub, Bauer, Jones, White, and many more — created new clinics on the medical side and utilized well the facilities of the famous Mallinckrodt Research Ward, described so vividly in Dr. Means's book, *Ward 4* (1958).

Above all, it was the new multidisciplinary approach that enabled Dr. Means's staff to produce such remarkable work through the nearly three decades of his chieftainship. This work had strong international overtones, particularly in the thyroid program. Note the MGH-London axis, and later the MGH-Mendoza (Argentina) axis developed by Dr. John B. Stanbury, head of the Thyroid Clinic until recently.

In 1937 Dr. Means published the first edition of his classic, *The Thyroid and Its Diseases,* which he and his associates later brought through two more editions.

Also in 1937 Dr. Means brought to MGH the distinction of inaugurating the age of nuclear medicine, when through his liaison with Karl Compton and Robley Evans at MIT he procured for young Dr. Saul Hertz a supply of radioactive iodine for tracer studies of thyroid physiology. In 1941 Dr. Hertz used this isotope in therapy for the first time anywhere, when treating patients with Graves's disease.

Dr. Means's social conscience erupted in his 1938 presidential address before the American College of Physicians, when he denounced ultraconservative policies of the American Medical Association. He always nurtured conscientiously the MGH tradition of caring for the whole patient. His booklet, *The Amenities of Ward Rounds* (1940) was written for distribution among his House Staff. It was reminiscent of a book by his eminent predecessor, Dr. James Jackson, entitled *Letters to a Young Physician* (1855).

On approaching statutory retirement (1951) he intensified his activity on the sociomedical front. He wrote articles for *Atlantic Monthly* on "England's Public Medicine," "The Doctors' Lobby" and "The Best Medicine for the Patient." The first two won him the 1951 award for outstanding journalism from the Sidney Hillman Foundation. In 1951 his feud with the AMA culminated in his resignation from the organization. In 1952 he wrote the foreword to Ida Cannon's *On the Social Frontier of Medicine,* and in 1953 he published another book, *Doctors, People, and Government.*

After retirement he served for six years as a consulting physician on the MIT health service, the director of which was his friend, Dr. Dana Farnsworth. Dr. Means praised Dr. Farnsworth for leavening the educative process with the insights of psychiatry.

Dr. Means was a president of the American Association of Physicians (1938) and author of its official history (1961); a Fellow of the American Academy of Arts and Sciences; and an honorary member of the Royal College of Physicians of London.

In 1961 the renovated Metabolic Research Laboratories in the Bulfinch Building of MGH were named in his honor. Thus his memory will be perpetuated in the building he loved so well.

Dr. Means was a gifted water colorist and sketcher, and a member of the Copley Society of Boston. He commissioned a young artist, Pietro Pezzati, to paint his portrait in oils. This portrait hangs in the Medical Staff Room so that future generations of MGH Staff will always know Dr. J. Howard Means, physician and humanist.

Dr. Means died in the Phillips House on September 3, 1967.

3 Bulfinch Relics

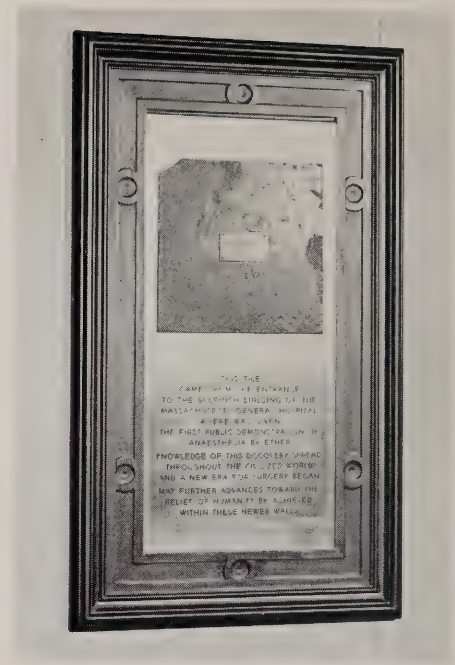
The floor tile mounted on the plaque which appears in the adjoining photograph is a recent gift from the MGH to the University of Rochester. The inscription on the plaque reads:

"This tile came from the entrance to the Bulfinch Building of the Massachusetts General Hospital where was given the first public demonstration of anaesthesia by ether. Knowledge of this discovery spread throughout the civilized world and a new era for surgery began. May further advances toward the relief of humanity be achieved within these newer walls."

This tile is a replacement for a similar tile which was sent to Rochester some years ago by Dr. Nathaniel W. Faxon, but which was stolen by vandals some time ago.

When Dr. Faxon migrated to Rochester in 1922, after having served MGH as an Assistant Director for three years, the University of Rochester had no medical school or hospital. The school was built by Dr. George Whipple, its first dean. Dr. Faxon built the Strong Memorial Hospital and served as its director from its opening in January 1926 until 1934, when he returned to the MGH to assume the directorship and help build the White Memorial Building. In 1958 the University of Rochester awarded Dr. Faxon the honorary degree of Doctor of Science.

Two other MGH relics were donated to distant institutions in 1963. A block of dressed Chelmsford granite from the Bulfinch Building was presented to Dr. M. A. Razek, surgeon of the new Maadi Military Hospital in Cairo, Egypt. Dr. Razek had just completed a training course in cardiac surgery here.



The other relic was a segment of white pine from the original timber of the Bulfinch Building given to Dr. T. Stewart Hamilton, executive director of the Hartford Hospital and at that time president of the American Hospital Association. Dr. Hamilton had written to 67 hospitals in all the American states and territories and all the Canadian provinces, requesting that they donate historically significant pieces of wood to be fashioned into sets of gavels and sound blocks. Among the donations were birchwood from the Grace-New Haven Hospital in Connecticut, diamond willow from Alaska, ifil wood from Guam, and Canadian maple from New Brunswick. Three sets of gavels and sound blocks were made in the carpentry shop at the Hartford Hospital. Dr. Hamilton presented two sets to the American Hospital Association, and the third set to his own hospital.

Dr. Hamilton was appointed an Assistant Director of MGH in 1941, and served as adjutant and briefly as executive officer of the Sixth General Hospital, the MGH unit in World War II. In 1946 he became director of the Newton-Wellesley Hospital, and in 1954 he migrated to Hartford.

Dr. Kazanjian Honored

Varaztad H. Kazanjian, DMD, MD, a member of the MGH Board of Honorary Surgeons, has been awarded an Honorary Fellowship in Dental Surgery by the Royal College of Physicians and Surgeons of Scotland. Dr. Kazanjian is Professor of Plastic Surgery, Emeritus, at the Harvard School of Dental Medicine. He is also Consulting Surgeon for Plastic Operations at the Massachusetts Eye and Ear Infirmary.

Joseph L. Tauro

Appointed Trustee

Joseph L. Tauro, chief legal counsel to Gov. John A. Volpe, was appointed by the Governor to the MGH Board of Trustees last June 14, filling the unexpired term of the late Rt. Rev. Robert P. Barry. Under the charter and by-laws of the Hospital, four members of the Board are annual gubernatorial appointees. Mr. Tauro has been an assistant U. S. Attorney and a special assistant Attorney General under two Massachusetts Attorneys General, Elliot Richardson and Edward Brooke. Mr. Tauro was named one of Greater Boston's Outstanding Young Men of 1966. He is a member of the Board of Managers of the Lynn Hospital and vice president of the Greater Lynn Heart Association.

A scientific exhibit on "Tin and Other Materials as Shields in Diagnostic Radiology," planned by Edward W. Webster, Ph.D., of the Radiology Department, and designed and produced by the Medical Art Unit, won an Honorable Mention Award at the recent meeting of the Radiological Society of North America held in Chicago.

Oil paintings by Ted Wyman of the Planning Office were exhibited last August by the Copley Society of Boston.

The NEWS of MGH

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Chief and Biologist Appointed for the Psychiatric Service

The recent appointments of Dr. Leon Eisenberg as Chief and Dr. Seymour S. Kety as Biologist of the MGH Psychiatric Service and of both as Professor of Psychiatry at the Harvard Medical School constitute visible evidence that MGH and Harvard intend to expand the role of psychiatry in the general hospital. In addition, Dr. Eisenberg is academic head of the Harvard teaching unit at the McLean Hospital in Belmont, which is governed by the MGH Board of Trustees.

Prior to his new appointment, Dr. Eisenberg was professor of child psychiatry at the Johns Hopkins University. He is a native of Philadelphia, and earned the AB and MD degrees at the University of Pennsylvania. Dr. Eisenberg has a broad understanding of biological science as a partner of clinical psychiatry.

Dr. Kety, prior to his new appointment, was chief of the Laboratory of Clinical Science, NIH. In 1961-62 he was Henry Phipps Professor and chairman of the department of psychiatry at Johns Hopkins University.

A native of Philadelphia, he had earned the AB and MD degrees at the University of Pennsylvania. He began his career under Dr. Joseph Aub in the Huntington Memorial Laboratories of Harvard University at the MGH, where in 1942-43 he was a research fellow in medicine. In 1948 he was appointed professor of clinical physiology at the University of Pennsylvania.

From 1956 until 1960 he was also a member of the MGH Scientific Advisory Committee, and in 1960 delivered the dedicatory address at the opening of the Stanley Cobb Psychiatric Research Laboratories at MGH. Now he is Director of the Biological Laboratories in the Department of Psychiatry at the MGH. He received the Theobald Smith Award of the American Association for the Advancement of Science in 1949, the Distinguished Service Award of the U. S. Department of Health, Education and Welfare in 1958, and the honorary D.Sc. degree from the University of Pennsylvania in 1965.

Ether Day — 1967

The annual service pin ceremony last October 16 marked the 121st anniversary of the first public demonstration of surgical anesthesia in the Ether Dome of the MGH. The speakers of the occasion were Mr. John E. Lawrence, Chairman of the Board of Trustees, and Dr. John H. Knowles, General Director.

Among the 292 honored guests who received pins for loyal service were four past and present Trustees: Phillips Ketchum, Honorary President; Francis C. Gray, President; Henry R. Guild, Vice President and Treasurer; and Ralph Lowell. Their periods of service range from 25 to 40 years.

Two MGH employees, Edward Butters and Mrs. Eleanor McGregor, received 40-year pins.

Mission to Vietnam

Dr. John H. Knowles, General Director, was a member of the 6-man Medical Appraisal Team flown to the Republic of Vietnam last August under the auspices of the U. S. Agency for International Development (USAID) to inspect civilian health care facilities and evaluate the American medical assistance program for civilian war casualties in that country.

In September the Medical Appraisal Team held meetings in Chicago and Washington, submitted a 100-page report to USAID, and conferred with President Johnson in the White House. USAID published a 4-page summary of their report early in October. Subsequently, three members of the Team, including Dr. Knowles, testified in Washington at hearings on Vietnam policy conducted by the Senate Subcommittee on Refugees and Escapees under the chairmanship of Senator Edward Kennedy.

On October 23 Dr. Knowles delivered an oral report of his trip, illustrated graphically with his own color slides, to MGH Staff and personnel in the Moseley Auditorium. His Vietnam diary fills the entire October issue of *The Pharos of Alpha Omega Alpha,* from which the following quotations were taken:

> "Our civilian medical team was well briefed . . . We most certainly were not brainwashed and came away with great respect for USAID. The mission was tightly organized; and we were able to see, hear and do an incredible amount of work in a very short time. . . .
>
> "Simply stated, the medical problem is that of an undeveloped, tropical country subjected to the added crushing burden of war. . . . I feel competent to judge the medical issue but am not completely informed and knowledgeable on the political-military issue. I am neither hawk nor dove, and will not fall into the trap of fallacious reductionism . . . I firmly believe that we must and can spend more money on the medical care program in South Vietnam — and of all the ways to win friends, surely the act of caring and giving medical care is the best. . . .
>
> "Our acute, curative medical effort

Continued on Page 6

A Report on the Medical Services

The following report was submitted on June 27, 1967 to the MGH Staff Associates by Dr. Alexander Leaf, Chief of the Medical Services. It is described by Dr. John H. Knowles, General Director, as "an extremely important paper and one which we should share with the whole MGH community."

These are challenging times for Medicine. On every side we find ourselves adjusting to new pressures — sociological, technological, and scientific. We are planning new curricula, developing experiments in improving the distribution of health services, examining our admission policy and bed utilization, building new critical-care facilities, computerizing our hospital service and laboratory activities, planning for a new role in continuing postgraduate education, tearing down old structures and building anew, creating committee after committee, and even reorganizing the august General Executive Committee. Nothing is too sacred to be improved.

With all these changes about us, the basic operations of the Medical Services remain quite sound. Care of patients, teaching, and research are of high quality, and continuous efforts are being made to improve further all three at the MGH.

MEDICAL STAFF. A major pleasure for me this past year has been to see the great strengths, harmonious existence, and complementary activities of both part-time and full-time staffs. My predecessors planned well indeed, and this excellent, devoted staff is their major legacy to the Hospital.

What has been happening to the Medical Staff over the past 16 years? Its numbers and its composition?

	1950	1960	1966
Staff	82	98	125
Fellows (Clin., Res.)	37	78	117
House Staff	25	31	41
	144	207	283

Of the 1966 Staff, 56 were part-time, and 69 full-time.

The unit system, originated by Dr. Walter Bauer, provides for a core of full-time staff members responsible for patient care, teaching, and research, with part-time staff joining in the specialty teaching and patient care. On the extremes, we have a few members who do only research and a much larger number of part-time internists who teach and practice without limitation of specialty interest. This arrangement gives the department strength in depth in most areas of modern medical practice. I believe in the wisdom of this system and will do everything to preserve this admixture of physicians involved full time in the care of patients and physicians committed largely to research activities.

SPACE. At the present time there are 108 Medical Service beds in the Bulfinch Building; this has changed little over the past two decades. There are on the average another 200 beds in the Baker Memorial and Phillips House occupied by Medical Service patients. With respect to the number of discharges from the Hospital for the year ending September 30, 1966, General Medicine is the largest single service within the Hospital.

In spite of the renovations and redecorating of the Bulfinch wards, recent federal legislation has made them outmoded. The guarantee of semiprivate hospital accommodations to all citizens covered under the vast new Medicare and Medicaid programs potentially deprives us of a large portion of our ward service and threatens thereby our teaching program. To avoid this calamity at a time when our teaching commitments must increase, we hope to move the Bulfinch service into the new North Building. At present stage of planning (and this is not yet official) the 6th, 7th and 8th floors of the North Tower, each floor with 35 beds, will just about accommodate the present Bulfinch service.

I add at this point, however, the fact that a modern teaching service requires more than just beds; it requires classrooms for medical and nursing classes, conference areas for House Staff, laboratories for House Staff and students, offices for nursing supervisors, dieticians and social service, as well as our treasured Walter Bauer Memorial Library. These must all be accommodated in functional proximity to the bed facility. All this must be carefully planned for in the projected move.

J. Howard Means, MD

EDUCATION. As the largest teaching hospital in the Harvard complex, we participate in a large fraction of the undergraduate clinical teaching. Over one third of the teaching in Medicine takes place on our services. This amounts to about 55 students being assigned to the MGH for their 12 weeks' introduction to the clinic. This is much more than our general services can accommodate, and heavy reliance must be placed on private patients. The part-time staff, in this as in other activities, has responded generously. I am sure that with due regard to amenities and consideration for the sick, most patients welcome rather than object to participation in teaching activities.

The public is rapidly being educated to the fact that where there is good teaching of medicine, there it is practiced best. To have a number of alert minds concentrating on their medical problems is likely to be even more helpful than the concentrated attention of one excellent clinician. We all stand to gain by such cooperative use of private patients for teaching, and we will soon achieve the state of having every bed a teaching bed. As our medical school classes enlarge — as they must — this state of affairs becomes mandatory.

Another area in which our teaching activities must increase is in the Ambulatory Clinics. In the past several years there has been a tendency to withdraw from this traditional teaching facility. Such retreat was justifiable in view of the relatively primitive conditions in the Ambulatory Clinics. With much effort on the part of the Staff and supportive cooperation from the Administration, there has been marked improvement in the Clinics. The physical facilities are now attractive. In cooperation with the Laboratory of Computer Science, a scheduling system is being worked out. The Medical Staff offers generously of its time in the Clinics, and I am recruiting some full-time staff for the Clinics. In addition to Dr. John Stoeckle, Drs. William Strole and Charles Weingarten each serve half-time in the Medical Clinic. Each is head of one of the four subdivisions of the Clinic. I would welcome other staff members who would like to make the Medical Clinics their major hospital commitment and participate as full-fledged members of the Medical Staff.

There are still important areas for major improvement in the Clinics. Unavailability of medical records, slow reporting of laboratory results, and delays in obtaining X-ray examinations and reports remain major stumbling blocks to a really professional activity. These problems are all currently under attack, and the forces mustered are for once sufficient to guarantee real and lasting solution. I expect our Medical Clinics to develop as high-quality, group-practice activities with larger numbers of full-time, departmental positions committed to this activity. Economic and social pressures, as well as our own pride in providing the best services for patient care throughout the hospital, are insistent in this regard.

Certain kinds of teaching can be best pursued in the setting of an Ambulatory Clinic. Case taking, with the student presented fresh, unrehearsed patients to test and develop his skills in history taking and physical examination, lends itself well to the clinic population. Dr. Stoeckle has raised funds to purchase video tape equipment which can provide audiovisual records of the student's performance. Later playback and critical dissection with peers and instructors provide an important learning experience in an important area of activity of physicians which in the past had been out of sight of the instructor.

This, I think, is only the beginning of the introduction of modern technology into our age-old teaching practices — a welcome and exciting prospect. I hope our staff will avail itself of these techniques to examine and improve their own practices.

I think that our House Staff training program is a good one, but we will be modifying and strengthening it as times change. We are just instituting elective rotations in the second year and opening the subspecialty areas of medicine to the Assistant Residents. I emphasize that the ARs during these rotations will participate fully in the clinical activities of the units but not in their research activities. I believe the House Staff experience should be designed for intensive training in clinical medicine. Research training is a separate matter, and each clinical activity deserves the undivided attention of the trainee at this stage of his development.

Since I have been in the Medical Service office many chiefs of medicine and directors of medical education from outlying hospitals have requested us to send residents and staff to their medical services. They have many reasons to argue why such affiliations would be mutually advantageous. If accommodated, these requests could easily spread our House Staff and younger staff thinly over the countryside, leaving few to care for matters at home. Clearly we have had to resist the temptation of such offers. It would hardly be good regional planning to weaken or dilute our own performance in response to such demands. This does not mean, however, that we don't have a strong interest in continuing postgraduate education.

As a more realistic approach to the problem, Dr. Daniel Federman, who, as you know, is Assistant Dean for Continuing Education, Harvard Medical School, will have his office next door to mine, and he will have the responsibility for developing postgraduate training programs both within the Hospital and in the community. We all appreciate Dan's talents as a teacher, and with his interests and fresh ideas in this area, I am confident that we will develop a position of leadership in this vital area of medical education.

An ad hoc committee of the GEC has been involved in examining the recent Millis Report of the AMA, and is currently making recommendations to the GEC for some corporate involvement in the House Staff training programs. With responsibility for the largest group of House Staff, I welcome such scrutiny by my peers of an activity which has traditionally been the sole prerogative of the individual Service Chief. I can see only advantages in having the review and advice of our practices by an interested group of experts. I think a standing committee on education within the Hospital will be valuable.

I look forward to their attention being focused on the education of Clinical and Research Fellows — a group now numbering more than 117 for the Medical Service and more than 287 for the whole Hospital. Surprisingly little attention has been paid by the Hospital as a teaching institution to this very large and important group of trainees. Although the many individual programs, I am certain, are largely excellent, I suspect that a careful examination would reveal areas that could benefit from such attention and be strengthened.

PATIENT CARE. With the advent of government support of patient care, our hospital facilities are being maximally stressed. Full occupancy, as Dr. John Knowles emphasizes, is essential to our state of solvency and permits us flexibility in the many improvements we are continuously making in our plant and staff. However, long waiting lists for elective admissions work particular hardships upon certain services, and change the illnesses that our House Staff and students see. The increasing costs of hospitalization (although third party coverage reduces the drain on the private pocketbook, it doesn't make lighter the drain on the public purse) and the increasing severity of illness required to qualify for hospital admission are redefining the role of the MGH in the community, as clearly analyzed by Dr. Thomas Gephart and the Committee on Admission Policy of the Utilization Review Committee. In the extreme, this situation may lead to only emergency and terminal patients getting into the Hospital, which might give us a patient population that may not benefit greatly from our ministrations, while a large segment of treatable and curable conditions may not gain access to our facility. This would be most unfortunate.

It seems dubious to me that we can permit a completely laissez-faire admitting policy to dictate the future of the Hospital. Thus, I think it is mandatory that we prepare ourselves to consider without prejudice or dogma the possibility of purposeful intervention in our admission practices in order to preserve the Hospital as we desire it. We must prepare ourselves for such possible action even as we monitor carefully what is currently transpiring to our hospital population.

After 146 years of open-door admitting policy, this must be approached carefully with clear definition of what our aims and our needs are. In the meantime, several alternatives for improving utilization of hospital facilities have been listed and discussed by the Committee on Admission Policy:

1. Continue the present policy, basing priority for admission solely on seriousness of illness insofar as possible.
2. Appoint a screening committee to evaluate retrospectively the appropriateness of admissions and to ensure appropriate utilization of beds.
3. Establish an admission committee to create and supervise an admission policy which might ensure a minimum number of admissions per physician per month, and to deal with other special admission problems, such as scheduling special procedures.
4. Assign quotas of private beds to each service according to past use and hospital needs, and delegate to each service the authority to control admissions to these beds.

As mentioned, a strict hands-off policy may change our institution beyond our teaching needs and our obligations to the community, and hence the first alternative seems inadequate. It seems unlikely that there still exists sufficient abuse of bed utilization to make its correction provide significant alleviation of the present congested system. We must all, however, be much more attentive than in the past to the proper utilization of our facilities. I think the third alternative to be the one we all would most like to avoid. I can imagine few volunteers for such an admission committee.

The assignment of quotas of beds to each service seems to me to provide a number of advantages:

1. Each service, by knowing its bed capacity and teaching needs, could plan more responsibly.
2. Assigning beds in this manner to each service would insure a rationalization of our hospital facilities in accord with the needs of the Hospital and the community.
3. It will behoove each service to utilize its beds efficiently, since then a larger volume of patients could be accommodated, more patients would be available for teaching, and, lastly, more income would be generated.
4. A designated area for each service would make the deployment of House Staff, Nursing Staff, and Staff more efficient. Geographical grouping of patients is essential for a private teaching service — to bring House Staff and attending Staff into constant close contact.
5. We do this now on the General Services, and staffing operates very smoothly.

The present long waiting lists should banish any fears that this arrangement will lead to empty beds in the Hospital. Unassigned buffer areas and boarding arrangement also can prevent empty beds. I think this method need not place too much power in the hands of service chiefs, as staff committees with assistance from Administration could be assigned responsibility.

SUPPORT FOR TEACHING. For as long as I have been associated with the Harvard Medical School, we have complained bitterly that we have had insufficient funds with which to support our teaching functions. Much of our clinical teaching of medical students and physicians has been supported indirectly through funds provided for research and by the generous participation of the part-time staff.

Support available for our research activities alone has made us lopsided. All functions of affiliated teaching hospitals — teaching, patient care, as well as research — need support. Current bureaucratic efforts by governmental agencies are aimed at stopping the leak of research funds into support of teaching. This makes it urgent that we

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Medical Photography Lab.

From left: Drs. Edgar Haber, Paul White and Edward Bland

First MGH Cardiologist Honored

The above photograph shows the three men who have headed MGH cardiology since its inception in 1914, the occasion being the dedication of the Paul Dudley White Cardiac Conference Room in the basement of the Bulfinch Building last November 7. This room contains an impressive array of framed photographs of physicians who have studied and worked in this department.

In the fall of 1914 Dr. White established the Cardiological Laboratory in the basement of Weld Ward G, a pavilion on the site of the present Vincent-Burnham Memorial Building. Here he did pioneering clinical investigation with an ECG apparatus which he had purchased with MGH funds in Cambridge, England, following his studies as a William O. Moseley Traveling Fellow (Harvard) under the scholars James MacKenzie and Thomas Lewis at the University College Hospital in London. This apparatus was the first used in America, and it produced 21,160 ECGs before being replaced in 1931. Dr. White also established the Cardiac Clinic in 1916.

Dr. Edward F. Bland served as Chief of this department from January 1, 1949 through June 30, 1964, when he was succeeded by Dr. Edgar Haber. The Cardiac Unit now comprises several clinics and laboratories, one of which is linked with the new MGH Cyclotron.

seek new sources of support for our educational mission. Tuition and grants from private foundations help, but they are not sufficient. I think we must generate income from the one salable activity we perform, care of patients. The new Medicare and Medicaid legislation comes at a most opportune time in this regard. Title XVIII of the Social Security Act, the Health Insurance Program for the Aged, provides semi-private care for all insured. "Moreover, the income of the individual beneficiary is not to be taken into account by the carrier in determining the amount which is considered to be a reasonable charge for a service rendered to him. There is no provision in the law for a carrier to evaluate the reasonableness of charges in light of an individual beneficiary's economic status." (*Federal Register*, 32:2688, Feb. 8, 1967)

"Attending physicians' services rendered to beneficiaries in a teaching setting are covered under the supplementary medical insurance program (Part B) and the payment for such services is on the basis of a reasonable charge. Payment on the basis of reasonable charge is applicable to the professional services rendered to a beneficiary by his attending physician where the attending physician provides personal and identifiable direction to interns or residents who are participating in the care of his patient."

The *Federal Register* also states, "A charge should be recognized under Part B for the services of an attending physician who involves residents and interns in the care of his patient only if his services to the patient are of the same character, in terms of the responsibilities to the patient that are assumed and fulfilled, as the services he renders to his other paying patients. The carrying out by the physician of these responsibilities would be demonstrated by such actions as: Reviewing the patient's history and physical examination and personally examining the patient within a reasonable period after admission; confirming or revising diagnosis; determining the course of treatment to be followed; assuring that any supervision needed by the interns and residents was furnished; and by making frequent reviews of the patient's progress."

This detailed account of the relationship of the attending physician to the patient fits exactly my expectation of the role of the Visit. I think it is high time that we collect the physician fees we have been legally generating on our general services. None of us can estimate exactly what this source of income may amount to, but with at least one third of the patients on the general services 65 years of age or older, the income under Medicare should be considerable, and with Medicaid in operation, even more.

I believe that all such income should be preassigned by us to hospital general funds under the jurisdiction of the Board of Trustees to support professional activities of the Staff. In general, these funds will be available to the hospital budget of each service to support primarily the teaching activities of that service. I believe each Visit should sign the forms as his own conscience dictates in each case without fear of prejudice. But I do believe that physician fees collected from our service patients are a legitimate source of support for staff in teaching hospitals, a support we very much need to place the quality of teaching on par with that of patient care and research in our institution.

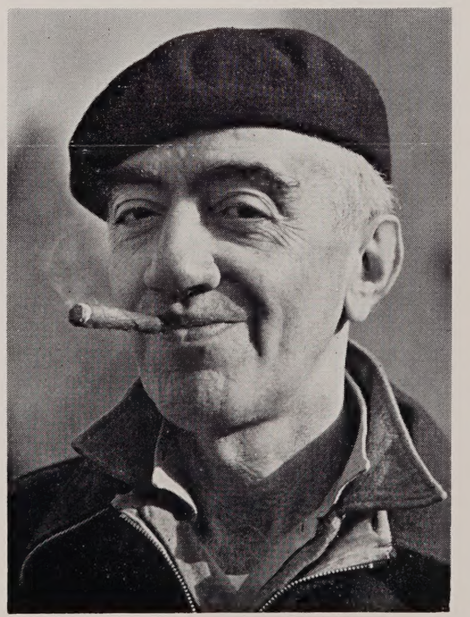
EXPERIMENTS IN COMMUNITY HEALTH. Federal legislation in 1966 has made medical care the birthright of every citizen. The inadequacy of the established methods to supply medical care to all who claim it may become increasingly apparent. Unfortunately many responsible for medical education complacently see the problem as only one of creating more physicians in their own image. Although more, adequately trained physicians would certainly help the situation, yet the magnitude of the service demands, the increasing specialization of today's young physicians, and the increasing expectations, as well as rights, of the citizenry make it apparent that qualitative, as well as quantitative changes are very much in order.

If the medical profession is to maintain the high standards of patient care of which it has traditionally been so proud, it must accept the challenge and begin to experiment with new patterns of distribution and delivery of medical care. The teaching hospitals should lead in such experiments.

The Charlestown-MGH Community Health Center, which is now being planned, will provide such an experiment. A facility in the community will include internists, pediatricians, and psychiatrists full-time, and other specialists as consultants, as well as nurses, social workers, technicians and other health personnel. Together they will provide first contact medical care, with our hospital facilities to back them up. As experience accumulates we may add or subtract from the facilities in Charlestown. Besides providing acute curative medicine, this unit will have responsibility for preventive medicine in the community. It will be charged with the mission to learn how the physician's training and knowledge can reach the most people through the involvement of modern technology and of other health personnel.

We think that such an experiment will help define the "comprehensive" physician about whom there is so much talk today. Only when experimental models for delivery of comprehensive medical care are undertaken does he become a reality, and his role and hence his training will be defined by his activities in making such models work. Today we can only speculate as to what his activities and training should be. I would venture a guess that he will bear little relation to the armchair creation of the Millis Report or of the Academy of General Practitioners. This should be an exciting and important new venture for the Hospital.

Correction: A brief notice in the previous issue of *The NEWS of MGH* inadvertently demoted Dr. Jan Koch-Weser. We are happy to state that he is still Chief of the Hypertension Clinic.



A brilliant camera study by David A. Lang, the subject being Al Rizzo of the MGH Building Service.

Treadwell Library

Loring Studios

Genevieve Cole

Genevieve Cole has completed one decade of devoted service as Treadwell Librarian, during which time the Library has been modernized, expanded, and brought up to professional standards. In the excellent line of Treadwell Librarians, she is the first to possess a degree in librarianship.

She began her career as a high school science teacher in the state of New York, after earning the A.B. degree at the State College for Teachers in Albany. Later she worked at the Woods Hole Oceanographic Institution (Mass.). She returned to teaching as an assistant in biology at Rockford College (Ill.). Then she enrolled at the University of Wisconsin to earn the M.S. degree in botany and the M.A. degree in library science. From 1952 through 1956 she was a librarian in the biological division of the Oak Ridge National Laboratory (Tenn.) and finally she came to the MGH.

Miss Cole has been an officer of the Boston chapter of the Special Libraries Association, and is currently national secretary of the Medical Library Association. She is also a member of the American Association for the Advancement of Science.

Vietnam . . .

Continued from Page 3

should be (and is) almost totally related to the surgical care of civilian 'war-related' casualties. With the establishment of 1300 more beds for civilian casualties (hopefully next to key Provincial Hospitals), any further effort and expenditure of money and manpower (which I believe is drastically needed) should be spent on elementary public health and preventive medicine measures."

Social Service Archives

Every institution faces the perpetual problem of caring for its records and historical documents. An institution may set up an archival unit in which other departments may deposit such materials for selective storage and preservation. The MGH Archives was activated in 1941, but today the greater portion of the archival function here is still being performed within the individual departments.

The Social Service Department, of which Eleanor Clark is Director, has recently completed an archival project in which records ranging over half a century were organized and deposited in several file cabinets in the Thayer Room. It is indeed fortunate that from the beginning this department has kept its records largely intact, for it was the first of its kind anywhere.

Medical social service was founded in 1905 in the MGH Outpatient Department by Dr. Richard Cabot, who had recognized that adverse social conditions under which patients live may prevent medical care from being effective. He felt this so strongly that he envisioned a hospital department devoted to the study and management of the pertinent social problems of patients. At first this new unit was a small, independent group of social workers whose salaries were paid from contributions made by Dr. Cabot and his friends (including Dr. William Osler). The initial successful demonstration of social service among outpatients led to its extension into the wards. Similar social service units soon appeared in hospitals throughout this country and abroad.

G.H.J.

Mary K. Taylor

Dr. Cabot appointed Ida Cannon his head social worker in 1907; and when the MGH Trustees in 1914 recognized the social service unit as a department of the Hospital, they appointed her Chief. Not only did she share Richard Cabot's recognition of the need for medical social service, but also was she uniquely equipped by temperament and administrative ability to help develop this new professional field. Since she was both a graduate nurse and a trained social worker, she was able to clarify and demonstrate the differences in function and practice between medical-social care and nursing care, thereby helping to prevent or overcome the confusion and controversy between the two fields which existed in certain areas. Her leadership in the founding of the American Association of Medical Social Workers encouraged that organization to define function and establish professional standards.

Thus the significance of the Cabot and Cannon section in the Social Service Archives is evident. In addition, many items relating to other pioneers in this field are included. Departmental records reflect the early development of administrative relationships with other hospital departments and with community agencies. Fortunately, most of the early social service case records have been preserved, and provide unique material for studies of the development of professional techniques.

Some years after her retirement in 1945, Miss Cannon began to sort out her papers and correspondence at home, preparatory to donating them to the Department. Josephine Barbour, her successor as Director, became interested in this project and delegated a part-time worker, Mary Taylor, to assist Miss Cannon. After the death of Miss Cannon, her papers were taken to the Hospital and Miss Taylor was assigned the task of organizing these papers and also of organizing the archives.

It was indeed fortunate that Miss Taylor was available. She has engaged extensively in practice, teaching, and writing. She has served as educational director in the social service department at the Presbyterian Hospital in New York City, as director of the social service department at the Washington University Clinics and Allied Hospitals in St. Louis, and, with the National Red Cross, as assistant director of service in military hospitals, in charge of training.

After official retirement, Miss Taylor returned to her family home in Newton, and in 1952 began part-time work at MGH. In 1955 she was editor of the 50th anniversary volume published by the Social Service Department. Having brought to completion the Social Service Archives, she terminated her employment here last August. However, because of her active interest in the study of social problems connected with medical care, she will probably not be content with inactivity for long.

Dr. Cole Honored

Dr. Edwin M. Cole, former head of the MGH Language, Speech and Reading Clinic, received the 1967 Award of the Orton Society of New York last October 27 in recognition of his neuropsychiatric and educational contributions in this field. Recently he was appointed to the advisory committee for administering the new state law relevant to perceptually handicapped children.

The MGH School of Medical Illustration graduated its final class last June 10 — Pamela Berglund, David Lang and Elaine Weinstein. Its termination will enable the Medical Art Unit — Chief Edith Tagrin, Paul Andriesse and Gary Sbona — to expand the primary function of preparing original material for visual communication.

Two graduates of the MGH 175-hour leadership course for directors of hospital volunteers receive their certificates. From left: Mary Ruth Wolf, Director of MGH Volunteers and originator of this annual course (1961); Dr. Ellsworth T. Neumann, MGH Administrator; Mrs. Carol Reardon of Dudley, Mass.; and Bridget Fleming of Saginaw, Mich.

Margaret G. Reilly, RN

Although Peggy Reilly, RN, is officially retired from the MGH nursing staff and faculty (and from 15 other nursing schools!) she continues to be involved in MGH affairs. She is busy collecting materials for use in writing about her 20 years of association with the MGH Skin Clinic, her participation in Dr. Richard Cabot's Cambridge-Somerville Youth Study in the 1930's, and her experiences at Base Hospital No. 6, the MGH overseas unit in World War I.

Peggy has long been president of the Bordeaux Belles, who were the nurses and secretaries at Base Hospital No. 6. She has been communicating recently with the veterans of No. 6, including Dr. Paul D. White, Dr. Carl Binger, Bishop Henry K. Sherrill, and Mr. Albert Hunter, long the president of the Talence Club, which comprises the enlisted men of that war unit. The literary fruits of Peggy's activities are anticipated with pleasure.

A Letter from Shiraz

The following is extracted from a joint letter dated June 10, 1967, and mailed to relatives of Dr. Lawrence D. Egbert, MGH anesthetist, and Dr. Walter Putschar, consultant in pathology, who were at that time working at the Medical School of Pahlavi University in Shiraz, Iran.

"We have all the modern equipment our specialties need, plus more room than we ever will have at the MGH . . . The sport of trying to speak with people who really speak Farci, not English, is a marvelous challenge . . . We find ourselves right in the middle of what Dr. Robert Shaw called a 'cultural collision' when he was here in 1965. Here sometimes you find yourself talking about something you didn't think you were talking about; even when you know the words (their Webster meanings) you still often can't understand or communicate the thoughts that you think you are communicating . . . If you ever get a chance, come on over here!"

Cocoanut Grove Anniversary

Twenty-five years ago (November 28, 1942) a flash fire broke out in the Melody Lounge of Cocoanut Grove, a Boston nightclub near Hotel Statler. It killed 491 persons and injured many more. Of the 114 casualties brought to MGH, 75 were dead on arrival, and 39 became the subjects of a new and simplified method of burn treatment which had just been developed by Dr. Oliver Cope's burn team to replace the unsatisfactory tannic acid method.

Early in 1942 the MGH had worked out an air raid disaster plan under the expert leadership of Dr. Nathaniel Faxon, Director, and Dr. Edward Churchill, Chief of the West Surgical Service. Six days before the Cocoanut Grove holocaust, a fortuitous dress rehearsal of the disaster plan had been carried out. After the deluge of real victims swept into EW and the adjacent lobby, all MGH services and departments, aided by numerous volunteers, met the supreme test with gratifying success.

White 6 was immediately cleared and converted into a burn ward. The fact that whole blood and frozen plasma were on hand was due to the foresight and persistence of Dr. Lamar Soutter in establishing the MGH Blood Bank in April 1942. The knowledgeable use of the new drug sodium sulfadiazine could be attributed to the fact that the first grant issued through the U. S. Office of Scientific Research and Development had been made to MGH earlier that year for a study of the chemotherapy of contaminated wounds by Dr. Champ Lyons. Two OSRD grants had also financed Dr. Cope's studies of burn shock and infection.

The surface burns of the Cocoanut Grove victims were simply covered with occlusive dressings of fine-mesh gauze lightly impregnated with boric acid ointment and applied under pressure *without* preliminary cleansing or debridement. This method worked: bacterial infection was confined to tissues originally devitalized by thermal injury, and early skin grafting was performed by Dr. Bradford Cannon with great success. This method was adopted by the Armed Forces in 1943.

MGH tennis team, 1925. From left: H. Faxon, F. Albright, E. Benedict and B. Wheeler. In this photo Dr. Benedict holds the Sir Cuthbert Wallace—Harvey Cushing Trophy won by MGH.

From this disaster experience there emerged also new knowledge of the bizarre tracheobronchial and pulmonary lesions that may accompany or follow thermal injury. Seven of the 39 burn patients treated at MGH died from such complications.

An MGH symposium on the management of the Cocoanut Grove burns formed the entire June 1943 issue of the *Annals of Surgery,* and was later published as a hard-cover volume by Lippincott.

Shriners' Dedication

The cornerstone of the Shriners Burns Institute on Blossom Street, a new neighbor of the MGH, was laid with Masonic pageantry last July 1, following a colorful parade from Aleppo Temple. The musical program was furnished by the Aleppo Oriental Band.

On the ceremonial platform were Imperial Sir Robert G. Wilson, Jr., master of ceremonies; Imperial Potentate Orville F. Rush; Harold Lloyd, the former cinema star who has contributed so much to the charitable projects of the Shriners; and Dr. Oliver Cope, Chief of Staff of the Institute.

Tennis Match

The MGH and Peter Bent Brigham Hospital tennis teams battled to a 3-3 tie at the Brookline Country Club last June 18, thus resuming a friendly rivalry that had been dormant since 1956. In 1922 Harvey Cushing had spearheaded the start of this interhospital tennis competition, and Sir Cuthbert Wallace, a London visitor to Dr. Cushing's laboratory, provided a handsome Paul Revere silver pitcher trophy (#1) for the winning team. They would have glowed with delight to see the enthusiasm and good spirit engendered by the resumption of this rivalry.

Capt. J. Hartwell Harrison of the Brigham team graciously insisted that the MGH take possession of the trophy (#2) for the year 1967-68, particularly as it had been residing at the Brigham Hospital since 1956.

WALTER T. ST. GOAR, MD

BOX SCORE

R. Ruben & J. Merrill (PBBH) defeated P. Gardner & W. St. Goar: 6-2, 1-6, 6-0.

R. Prescott & G. Andros (MGH) defeated J. Shelburne & G. Cahill: 6-3, 4-6, 7-5.

J. Murray & N. Rudman (PBBH) defeated G. Baker & P. Mansfield: 6-3, 4-6, 7-5.

W. Brown & B. Bushueff (PBBH) defeated W. Baker & T. Harris: 6-0, 6-4.

E. Maynard & S. Thier (MGH) defeated R. Wells & J. H. Harrison: 6-2, 6-2.

A. Leaf & W. Stason (MGH) defeated J. Merrill, Jr. & H. Tyler: 6-3, 6-2.